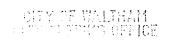


# City of Waltham

## Jeannette A. McCarthy Mayor



2922 DEC -8 ANII: 29

4 1011450

December 8, 2022

TO:

The City Council

RE:

Cornelia Warren Farm and Field House - 240 Beaver Street

Dear Councillors:

## Enclosed please find:

- 1. Assessor Information
- 2. Auditing Department Information
- 3. Building Department Information
- 4. Consolidated Public Works Department Information
- 5. Environmental Information
- 6. Fire Department Information
- 7. Law Department Information
- 8. Map provided by UMASS
- 9. Treasurer Department Information

The Law Department and I are available to discuss any of the above information with you.

Sincerely yours,

Jeannette A. McCarthy

JAM/sm

enclosures

# ASSESSOR INFORMATION REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET

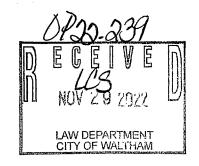


# Assessors Francis P. Craig, Chair AMY CIASSIE BERNADETTE VAZQUEZ

# City of Waltham

**MASSACHUSETTS** 

#### **BOARD OF ASSESSORS**



## **MEMORANDUM**

TO:

Luke Stanton-Assistant City Solicitor

FROM:

Francis P. Craig

FPC

DATE:

November 28, 2022

RE:

Waltham Field Station- 240 Beaver Street

#### Luke

The Mayor asks that I send you the documents which I received from the tenants at the field station. Accordingly, please find attached:

- 1- Second Extension of license Agreement- Waltham Fields Community Farm;
- 2- Administration Building floor plan and square foot layout of rented offices;
- 3- Memorandum of Agreement and Grant of License-Tufts University;
- 4- Agreement and Conditions of Use of Office Facilities at UMass Waltham: Grow Native Massachusetts;
- 5- First Extension of License Agreement- Grow Native Mass.;
- 6- Agreement and Conditions for Use of Office Facilities at UMass Waltham;
  - a. Boston Area Gleaners.
  - b. Exhibit B and Insurance certificate.
- 7- Agreement and Conditions for Use of Office Facilities at UMass Waltham;
  - a. Green Rows of Waltham;
  - b. First Extension of License Agreement- Green Rows of Waltham.

Please note that I have not included copies of the charitable organizations filings pursuant to MGL c. 59, §5 clause 3(b); state tax form 3ABC. Should you require such filings, please let me know.

Thank you.

Frank



#### SECOND EXTENSION OF LICENSE AGREEMENT

This Second Extension of License Agreement ("Second Extension") is made on December 15, 2020 by and between the University of Massachusetts Amherst ("University") and Community Farms Outreach d/b/a Waltham Fields Community Farm ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018 and a First Extension dated April 30, 2020, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. TERM: The term of the Agreement shall be extended on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of One Thousand Six Hundred Sixty-two Dollars and Fifty cents (\$1,662.50) per month.
- 3. PREMISES: The text in Section 2 (Premises) is hereby deleted and replaced with the following text:

"Use of offices 07, 08, 108A, 110, 112, 117, and 119, closets 08A and 118, hallway 112A, restroom 117A, and store room 02, all located within the main building at 240 Beaver Street, Waltham, MA, and land consisting of 8.25 acres farm land and land occupied by CSA Barn, Pesticide Storage Building, Greenhouses 6 and 7, Agricultural Storage Shed, Volunteer Shed, and Learning Garden, as shown in Exhibit A pages one through three."

- Section 22 (Miscellaneous Provisions) Exhibit A Licensed Land dated April 27, 2020 is hereby deleted and replaced with Exhibit A – Licensed Land dated January 13, 2021. Basement Floor Plan dated August 10, 2011, and First Floor Plan dated August 10, 2011.
- 5. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Second Extension as of the date first written above.

UNIVERSITY:

UNIVERSITY OF MASSACHSETTS

By: andrew P. Mangels

Name: Andrew P. Mangels

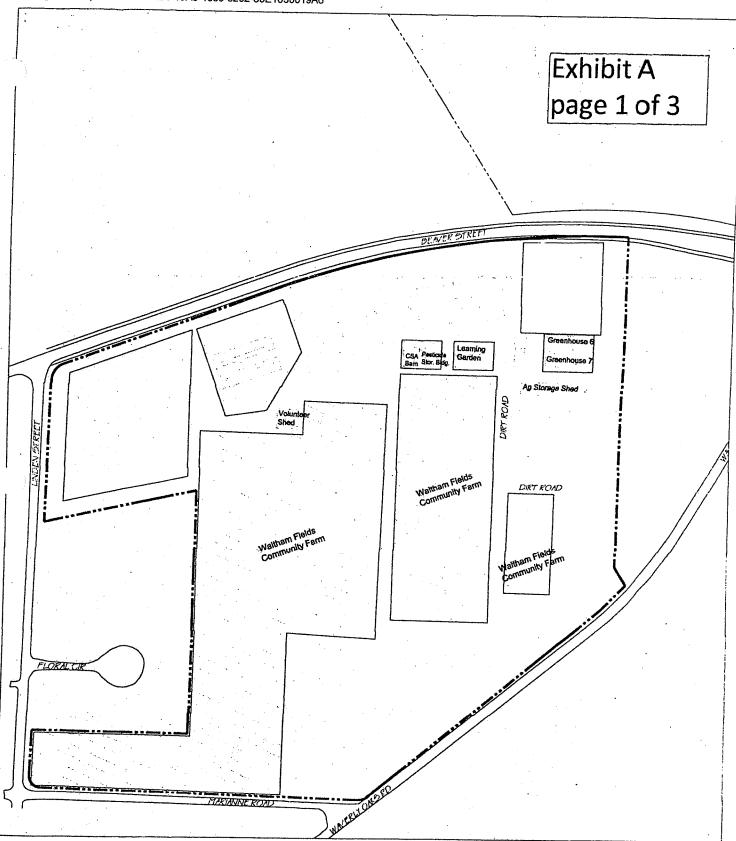
Title: Vice Chancellor for Administration and Finance

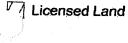
LICENSEE:

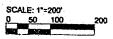
COMMUNITY FARMS OUTREACH

By: Name: Stacey Daley

Title: Executive Director







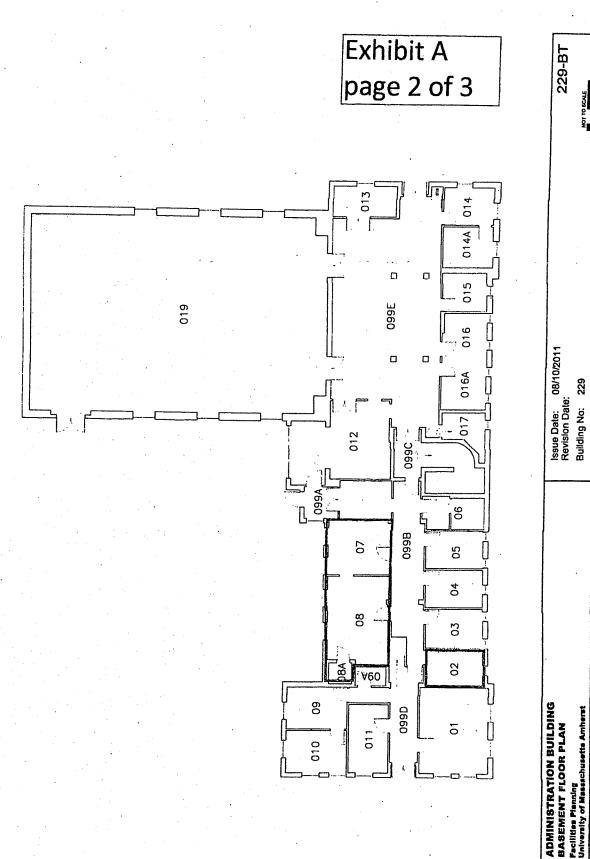
## WALTHAM STATION

1/13/2021

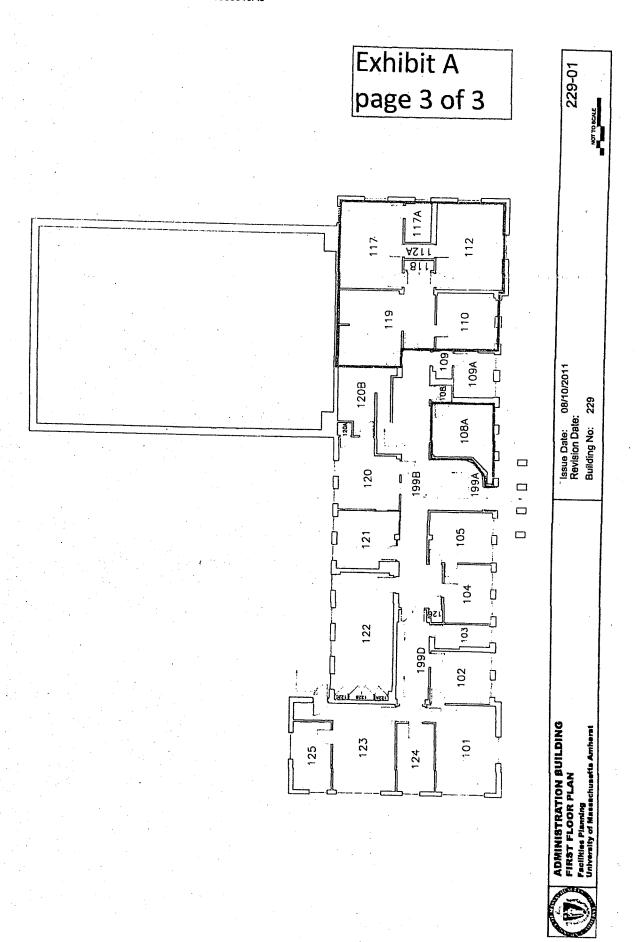
COMMUNITY FARMS OUTREACH EXHIBIT A - LICENSED LAND

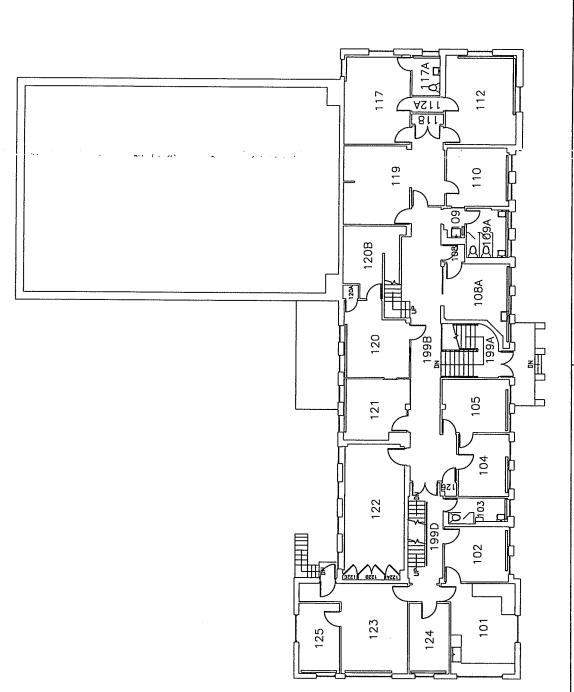


UMass Campus Planning





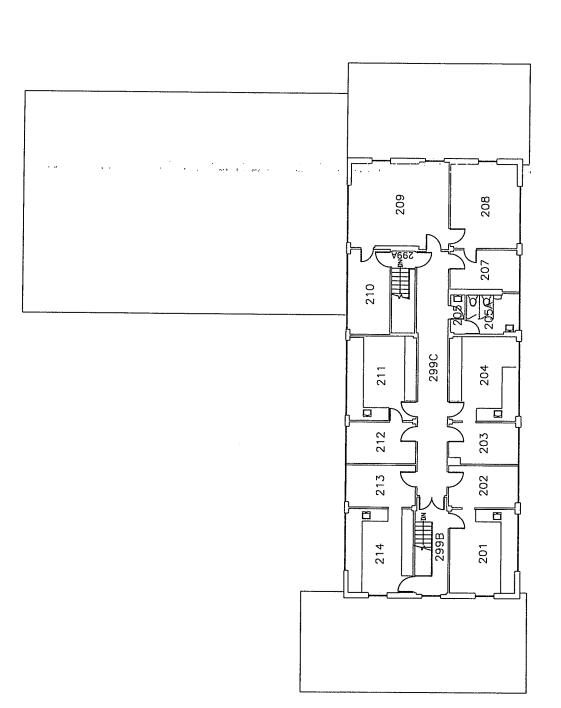






Issue Date: 08/10/2011 Revision Date: Building No: 229

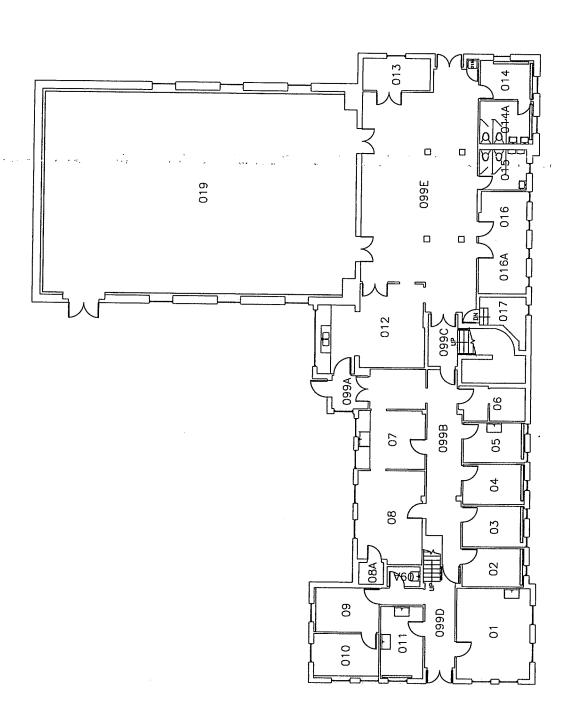
229-01



ADMINISTRATION BUILDING SECOND FLOOR PLAN Facilities Planning University of Massachusetts Amherst

Issue Date: 08/10/2011 Revision Date: Building No: 229

229-02



Issue Date: 08/10/2011 Revision Date: Building No: 229

229-BT





## 240 Beaver Street - Basement and First Floor Office Measurements

Office Room numbers per UMass 8/10/2011 Floor Plan (not actual numbers on doors)

## asement Level, Room #1

270 sq. ft

Office Rm 1: 18'x15'

## Basement Level, Room #7

155.25 sq. ft

Office Rm 7: 13′ 5″ x 11′ 5″

## Basement Level, Room #8

249.75 sq. ft

Office Rm. 8: 18' 5" x 13' 5"

## Basement Level, Room #9

117 sq. ft

Office Rm 9: 13' x 9'

## Basement Level, Room #10

117 sq. ft

Office Rm 10: 13' x 9'

## First Floor, Room #108A

121 sq. ft.

Office Rm 108A 11' x 11'

#### First Floor, Room #110

141.25 sq. ft

Office Rm 110 12.5' x 11.3'

First Floor, Room #112

## 270 sq. ft

Office Rm 112 18' x 15'

First Floor, Room #117 167.4 sq. ft

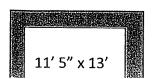
Office Rm 117 13.5' x 12.4'

First Floor, Room #119 266.5 sq. ft

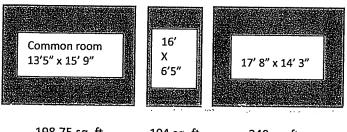
Office Rm 119 13' x 20.5'

Former 4-H Offices – 2<sup>nd</sup> Floor, Rooms 106 and 119 = Combined 951.67 sq. ft.

Office Room 106 = 149.5 sq. ft.



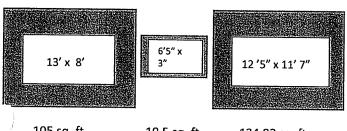
## Office Room 119 = Combined 802.17 sq. ft.



198.75 sq. ft.

104 sq. ft.

240 sq. ft.



105 sq. ft.

19.5 sq. ft.

134.92 sq. ft.

#### FY2019:

Leased a combined 909 sq. ft. office space at \$13.20 sq. ft. = \$12,000/year Actual Lease = \$20,550 (includes \$600 for storage closet and \$7,950 for 2 greenhouses and farm land)

#### r 12020:

Revised lease to reflect 1,207.17 sq. ft. office space at an estimated \$13.20/sq. ft. = \$15,935

\*An increase of 298.17 sq. ft. from prior lease agreement (at \$13.20/sq.ft = \$3,935.85)

#### FY2020 Lease Estimate:

- \$15,935= Interior Lease estimate at current rate
- + \$7,950 = Exterior Acreage (land and utilities for 2 greenhouses and 8.25 acres of farm land)
- + \$600 = Storage Closet

<sup>= \$24,485/</sup>year

<sup>\*</sup>Estimated increase of \$3,935 annually for leased office space at 240 Beaver Street at current sq. ft and acreage rates

## MEMORANDUM OF AGREEMENT AND GRANT OF LICENSE

This Memorandum of Agreement and Grant of License is entered into on this 26<sup>th</sup> day of May, 2021 by and between the University of Massachusetts Amherst, having an address of 181 Presidents Drive, Amherst, Massachusetts 01003 (the "University" or "Licensor"), and Tufts University c/o Colin Orians, having an address of 364 Robinson Hall, 200 College Avenue – Tufts University, Medford, MA 02155 (the "Licensee"). The University and the Licensee may be referred to herein collectively as the "Parties".

WHEREAS, the University is the owner of certain property located at 240 Beaver Street, Waltham, Massachusetts (the "University Property");

WHEREAS, the Licensee desires to use approximately one (1) acre of the University Property for irrigation testing (the "Licensed Premises"). The Licensed Premises is depicted in **Exhibit A**, attached hereto and incorporated herein by reference.

WHEREAS, the University is amenable to granting the Licensee the foregoing rights, subject to the terms and conditions set forth below;

NOW, THEREFORE, in exchange for the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged by the Parties, the Parties agree as follows:

- 1. <u>Term of License</u>. The Term of this License shall begin on June 1, 2021 and shall thereafter continue on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. <u>Terms of Use; Permitted Use</u>. The Licensee may enter and use the Licensed Premises at any time and from time to time during the Term for irrigation testing and related work ("Permitted Use"). The Licensee shall not interfere unreasonably with the use of the University Property by the University and others entitled thereto and shall comply with any reasonable rules and regulations governing the use of the University Property.
- 3. <u>Fee.</u> In exchange for the rights granted herein, Licensee shall pay Fifty Dollars (\$50.00) per month to the University on or before the first of each month, beginning on June 1, 2021.
- 4. Release, Indemnification. The University makes no representations or warranties as to the condition of the Licensed Premises. The Licensee releases and holds the University harmless against any claim by any of the Licensee for any injury or damage arising from said entry. The Licensee shall defend, indemnify and hold harmless the University from any and all liabilities, damages, loss, costs expenses (including reasonable attorneys' fees), causes of action, suits, claims, demands or judgments arising out of or related to the negligence of any of the Licensee in connection with said entry, and/or other activities undertaken in connection with this License, the exercise of the rights granted by this License, or the release, emission, storage or maintenance by any of the Licensee of any Hazardous Materials on or near the Licensed

Premises during said entry, or activities undertaken in connection with this License. The provisions contained in this Section shall survive the expiration or termination of this License.

- 5. Insurance. The Licensee shall obtain public liability insurance, including coverage for bodily injury, wrongful death and property damage, in the minimum amount set forth herein to support the Licensee's Permitted Use of the Licensed Premises under the terms and conditions of this License, to indemnify, defend and hold harmless the University: General \$1,000,000.00/occurrence, \$2,000,000.00/aggregate; Bodily Injury Liability: \$1,000,000.00/occurrence, \$2,000,000.00/aggregate. Prior to entering the University Property the Licensee shall provide the University with a copy of such insurance policy in each case indicating the University is an additional insured on the policy and showing compliance with the foregoing provisions. The insurance coverage required hereunder shall be issued by insurance companies licensed by the Massachusetts Division of Insurance to do business in the Commonwealth of Massachusetts and having a Best's rating of B+ or better. The Licensee also shall obtain Vehicle Liability Insurance covering each vehicle of Licensee entering University Property in an amount not less than the compulsory coverage required in Massachusetts. The Licensee's failure to carry insurance shall be a material default of this License.
- 6. <u>Termination</u>. Either party may terminate this License upon thirty (30) days prior written notice to the other party.
- 7. <u>Surrender</u>. In the event that this License expires or is terminated, the Licensee shall, at its own expense, remove all its facilities, apparatus, equipment and property from the Licensed Premises, and shall restore the Licensed Premises to their original condition as at the commencement of this License, as nearly as possible. This obligation shall survive the expiration or termination of this License.
- 8. The Licensee shall not use, generate, store or dispose of any Hazardous Materials on, under, about or within the Licensed Premises in violation of any law or regulation. As used in this paragraph, "Hazardous Material" shall mean any oil, hazardous waste, substances or materials, or pollutants, as such terms are defined under any existing or future statutory or common law (including but not limited to Comprehensive Environmental, Response, Compensation and Liability Act, 42 U.S.C. 9601 et seq., the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq., the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, G.L. c. 21E, and all applicable rules and regulations promulgated thereunder).
- 9. <u>Authorized Representatives</u>. In any case in which an approval, decision or permission is needed from one of the parties pursuant to this License or in connection with the matters contemplated herein, the following persons are authorized hereby to give such approval, decision or permission for the respective party:

#### For the University:

Name:

Steven Goodwin, Deputy Chancellor

Address:

Room 374, Whitmore Administration Building

181 Presidents Drive, Amherst, MA 01003

Email:

sgoodwin@cns.umass.edu

#### For the Licensee:

Name:

Tufts University c/o Colin Orians

Boston Area Climate Experiment

Address:

364 Robinson Hall

200 College Avenue - Tufts University

Medford, MA 02155

Telephone:

617-627-3543

Email:

colin.orians@tufts.edu

- No Estate or Obligation Created. This License shall not be construed as creating 10. or vesting in the Licensee any estate in the Property, but only the limited right of use as hereinabove stated.
- Modifications and Amendments. Modifications or amendments to this License shall be in writing and duly executed by all the parties hereto to be effective.
- 12. Governing Law. This License shall be governed and construed in accordance with the laws of the Commonwealth of Massachusetts.
- 13. Entire Agreement. This License represents the entire agreement between the Parties and supersedes all other written or unwritten agreements between the Parties.

IN WITNESS THEREOF, the parties have signed this Memorandum of Agreement on the date first written above.

TUFTS UNIVERSITY

UNIVERSITY OF MASSACHUSETTS, **AMHERST** 

The second secon

Robert Chihade Director of Real Estate. **Tufts University** 

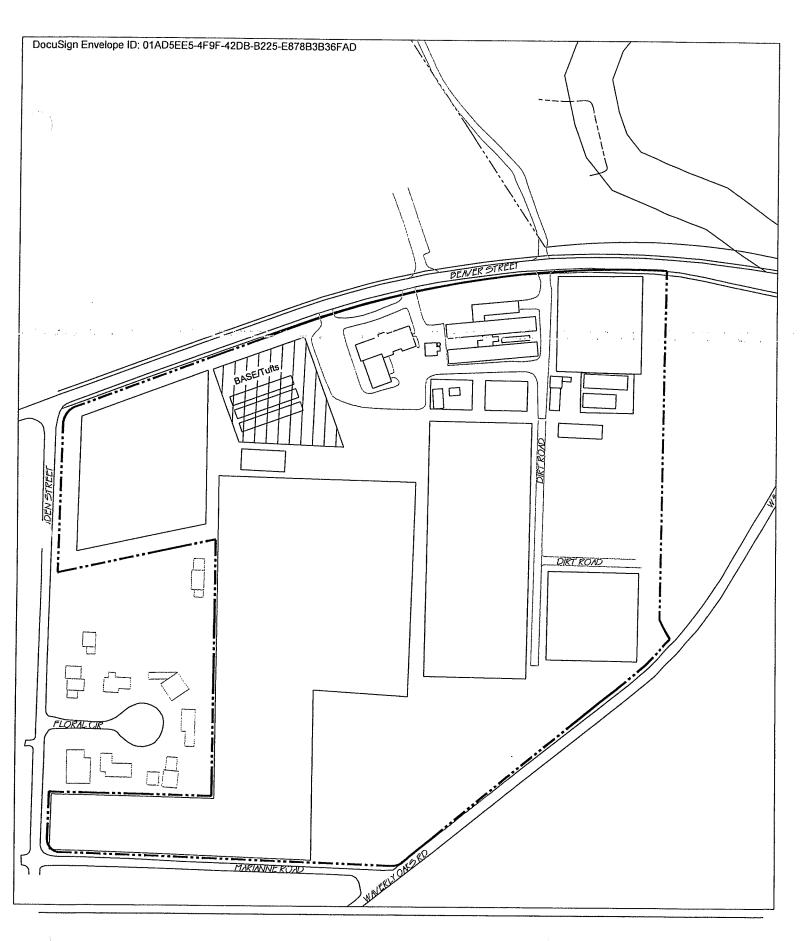
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Andrew P. Mangels Vice Chancellor for

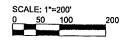
Administration & Finance

# EXHIBIT A MAP OF LICENSED PREMISES

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\_\_\_Licensed Land



## EXHIBIT A

B.A.S.E. / TUFTS LICENSED LAND 6/25/2020



UMass Campus Planning

# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of office space at the UMass Eastern Massachusetts Outreach Center. This agreement is between <u>Grow Native Massachusetts</u> (hereinafter Licensee), a <u>non profit corporation</u> and the University of Massachusetts (hereinafter referred to as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver Street in Waltham and further described in Section 2 of this Agreement; and

WHEREAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

## 1. <u>REFERENCE DATA:</u>

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee:

Grow Native Massachusetts c/o Claudia Thompson 240 Beaver Street Waltham, MA 02453

Premises: Use of one office. These rooms, number 203 & 204, are located on the 2<sup>nd</sup> floor of the main building and demonstration garden area (approximately 50FT x 100FT) located in the "Rose Garden" area at 240 Beaver Street, Waltham, MA.

Permitted Use: The office will be used for administrative functions related to the mission of the organization. The garden will be used to demonstrate sustainable plantings.

#### 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at room 203 & 204.

#### 3. PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: The office will be used for administrative functions related to the mission of the organization.

Specific rules governing access to and use of these facilities are attached as **Exhibit B** and are binding upon both parties.

## 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use.

#### 5. TERM

Term of Agreement: July 1, 2018 to December 31, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

#### 6. HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

#### 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

\$7,500.00

#### 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the

issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

## 9. <u>ALTERATION OF THE PREMISES</u>

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as Exhibit C. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

## 10. <u>LICENSEE'S EQUIPMENT</u>

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

## 11. <u>UTILITIES</u>

The University shall provide janitorial services for common areas of the buildings and general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

## 12. <u>CONDUCT OF LICENSEE</u>

## Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by

duly designated personnel of the University.

Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in Exhibit B.

Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

Cost of Operations

Except as otherwise expressly set forth in this Agreement, Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

Hazardous Materials

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert

Schrader.

## Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement, Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

## Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

#### 13. INDEMNIFICATION

Not Applicable

#### 14. RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage caused by any act of Licensee's invitees or members of the general public.

#### 15. **INSURANCE**

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

- Comprehensive public liability insurance in an amount as required by Massachusetts law. Α.
- Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an B. amount as required by Massachusetts law.

- C. Workers Compensation Insurance covering Licensee's employees upon the Premises in such amounts as are required by law.
- D. Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as **Exhibit D**.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

#### 16. ASSIGNMENT

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

## 17. RIGHTS OF UNIVERSITY AND AGENCY TO ENTER

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

## 18. TERMINATION

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause</u>. Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. For Cause. If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails

to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.

C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18, Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

## 19. NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

## 20. <u>NON-DISCRIMINATION</u>

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in employment.

## 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

## 22. <u>MISCELLANEOUS PROVISIONS</u>

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver is in writing and is signed by the party to be charged.

This Agreement is to take effect as a sealed instrument.

The following exhibits and attachments are made a part of this Agreement for all purposes:

Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee

Exhibit B - Specific Rules Governing Access and Use of Facility

Exhibit C - Schedule of Permitted Alterations and Improvements

Exhibit D - Insurance Certificate(s)

## AGREED AND ACCEPTED

**UNIVERSITY OF** MASSACHUSETTS:

LICENSEE:

Joe Shoenfeld, Associate Director Center for Agriculture, Food and the Environment University of Massachusetts

Claudia Thompson Grow Native Massachusetts

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Exhibit B Use of Grounds and Land at UMass Waltham, 240 Beaver Street, Waltham, Mass.

## Specific Rules Governing Access To and Use of Facility

The following rules apply to use of the facility. All communications related to compliance with use rules and requests for permitted variances should be directed to Facility Manager (Tony Mazzeo) at the facility.

## **General Rules:**

**Civility and Adherence to Rules:** Licensees are responsible for actions of their staff, guests and general public invited onto premises. Licensee is responsible for ensuring compliance with all facility rules.

**Hours of Operation:** Facility is open to licensees and their guests. The building is accessible from 6 AM-11 PM. Outside grounds are accessible from 6 AM till dark.

**Parking:** Parking is generally available in lots surrounding the building. No parking is allowed on the grass without prior approval. No vehicles are to be left overnight without prior approval.

Persons Authorized to Have Access to Facility: Each licensee is to provide to the Facility Manager a list of persons who will have regular access to the facility. All persons having regular access to the building must be over the age of 18. For persons utilizing space within the buildings this list will specifically identify those who are to receive building keys.

**Special Events:** Special events, such as plant sales, shows, educational programs and community events, which will use additional areas of the facility are permitted, subject to the approval of the University. Use of the facility can be scheduled through the Facility Manager. Additional fees may be charged to cover related costs to the University, such as staff time, rubbish removal, etc.

# Operational Rules for Organizations Using the Grounds and Land

Facility Access: The grounds are open to licensees from 6 AM - dark. Cars are to be driven onto grass areas only to load and unload materials or for handicapped access. Parking areas for handicapped access will be identified in advance.

**Staff Services:** University staff are responsible for operation and maintenance of the facility. University staff do not provide plant production or administrative services. Each organization must provide their own labor and related services.

**Rubbish and Organic Materials Removal:** Licensee is responsible for removing rubbish and recyclable materials to dumpsters and/or receptacles for recycling. Plant waste and related organic materials are to be discarded in areas identified by the facility manager.

Site Maintenance & Appearance: Assigned area must appear neat, clean, and orderly throughout the year. Refuse cannot be left at the site. End of the season clean-up is required. Details for clean-up and closing of land operations will be provided.

Water and Utilities: Water is generally provided to each site. Water conservation must be practiced. Water leaks are to be reported to the Facility Manager. All groups using more than an acre of land and the community garden group (GROW) will provide their own water meter in order to monitor use. The University will limit water use as deemed necessary.

Alterations and Changes in Use of the Land: The land can only be used for the purpose stated in the application form and Agreement. Any changes in use or changes to the land or landscape must be requested in writing to the Facility Manager. This includes pruning any surrounding trees or shrubs and adding structures, fencing, trellises or related items.

**Signage:** Small descriptive signs are to be posted at the site, identifying the organization, use of the land (purpose) and contact person for further information.

**Contacts and Communications:** All issues related to building and facility use should be brought to the attention of the Facility Manager, Tony Mazzeo.

Joe Shoenfeld Associate Director, UMass Center for Agriculture, Food and the Environment July, 2018



## CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 08/01/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Services Northeast, Inc.	CONTACT NAME:						
Providence RI Office 100 westminster Street, 10th Floor Providence RI 02903-2393 USA	(A/C. No. Ext): E-MAIL ADDRESS:	(866) 283	-7122		FAX (AJC, No.): (800)	363-01	.05
		INSURER(S) AFFORDING COVERAGE				NAIC#	
INSURED	INSURER A:	United	Educators	Ins, a	Reciprocal	RRG	10020
University of Massachusetts	INSURER B:						
333 South Street, Suite 450 Shrewsbury MA 01545 USA	INSURER C:						
The transfer and the second of	INSURER D:				Manufacture of the control of the co		
	INSURER E:						
	INSURER F:						

COVERAGES

CERTIFICATE NUMBER: 570072548348

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requeste

INSR LTR		TYPE OF INSURANCE	ADDL	SUBR	POLICY NUMBER	POLICY EFF	POLICY EXP (MM/DD/YYYY)	LIMITS	
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								MED EXP (Any one person)	Excluded
								PERSONAL & ADV INJURY	Included
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$3,000,000
	Х	POLICY PRO-						PRODUCTS - COMP/OP AGG	Included
		OTHER:						SIR	\$250,000
	AUT	OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	
		ANY AUTO						BODILY INJURY (Per person)	
		OWNED SCHEDULED						BODILY INJURY (Per accident)	
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DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached it more space is required)

CERTIFICATE H	<b>OLDER</b>
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#### CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS,

Grow Native Massachusetts Attn: Claudia Thompson 240 Beaver Street waltham MA 02452 USA

AUTHORIZED REPRESENTATIVE

Authorized Representative

Authorized Representative

Authorized Representative

Authorized Representative

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## FIRST EXTENSION OF LICENSE AGREEMENT

This First Extension of License Agreement ("First Extension") is made on <u>January 30, 2020</u> by and between the University of Massachusetts Amherst ("University") and Grow Native Massachusetts ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. Section 1 (Reference Data) of the Agreement shall be modified by deleting the Mailing Address of the University currently listed and replacing same with: "Steven Goodwin, Whitmore Administration Building Room 347, 181 Presidents Drive, Amherst, MA 01003".
- 2. TERM: The term of the Agreement shall be extended through December 31, 2020.
- 3. PREMISES: Rooms 207 and 208 are added to the rooms available for use by the Licensee.
- 4. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of Five Thousand and 00/100 Dollars (\$5,000.00), payable in advance in monthly installments of Four Hundred Sixteen Dollars and Sixty-seven cents (\$416.67) per month.
- 5. Section 12 (Surrender of Premises) is hereby amended by deleting the following language in its entirety: "However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastropkic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises."
- 6. Section 12 (Hazardous Materials) is hereby amended to replace "Robert Schrader" with "the University's Environmental Health & Safety Office".
- 7. Section 15 (Insurance) is hereby amended to add the following to the end of the section: "All certificates of insurance from Licensee shall list the University as an additional insured."

8. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

UNIVERSITY: UNIVERSITY OF MASSACHSETTS

By: \_\_\_\_\_ Name: Andrew P. Mangels

Title: Vice Chancellor for Administration and Finance

LICENSEE:

**GROW NATIVE MASSACHUSETTS** 

Title: President

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Certificate No: 570072548348



# **CERTIFICATE OF LIABILITY INSURANCE**

DATE(MM/DD/YYYY) 08/01/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER			CONTAC' NAME:	Т				
AON Risk Services Northeast, Inc. Providence RI Office 100 Westminster Street, 10th Floor Providence RI 02903-2393 USA			PHONE (A/C. No.	(000)	283-7122	FAX (A/C, No.): (800)	363-0105	
			E-MAIL ADDRESS:					
				INS	URER(S) AFFO	RDING COVERAGE		NAIC#
INSURED			INSURER	A: Unit	ed Educator	rs Ins, a Reciprocal	RRG 100	20
University of Massachusetts 333 South Street, Suite 450			INSURER				1	
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Grow Nativo Naccachusens			AUTHORIZED REPRESENTATIVE					
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Aon Prish Services Northeast Inc.

# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of office space at the UMass Eastern Massachusetts Outreach Center. This agreement is between <u>Boston Area Gleaners (hereinafter Licensee)</u>, a <u>non profit corporation</u>, and the University of Massachusetts (hereinafter referred to as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver Street in Waltham and further described in Section 2 of this Agreement; and

WHEREAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

### 1. REFERENCE DATA:

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee:

Boston Area Gleaners 240 Beaver Street Waltham, MA 02452

Premises: Use of four offices. These rooms, number 201, 202, 211, & 212, are located on the 2<sup>nd</sup> floor of the main building at 240 Beaver Street, Waltham, MA.

Permitted Use: The office will be used for administrative functions related to the mission of the organization.

Consideration to be Paid by Licensee: \$15,000.00 for office



**UMass Extension** 

Mass. Water Resources Research Center Mass. Agricultural Experiment Station **UMass Research and Education Farms** 

Office of the Director - Stockbridge Hall - 80 Campus Center Way - Amherst, MA 01003-9246 - p: 413.545.4800 - f: 413.545.6555 - ag.umass.edu

August 20, 2018

Ms. Laurie Caldwell **Executive Director** Boston Area Gleaners 240 Beaver Street Waltham, MA 02452

Dear Laurie,

Enclosed please find a License agreement for land and offices at Waltham for the period July 1, 2018, -December 31, 2019. The license fee is \$15,000.

Please note that there is a copy of Exhibit B attached to this agreement. Please note that the only substantive change to this document from the past is the addition, in the fourth rule listed, of the sentence: "All persons having regular access to the building must be over the age of 18."

Please sign and return one copy of the license agreement to me along with a copy of insurance certificates for liability and workman's compensation (if applicable). Sending by signed PDF is OK. The invoice for the office space at Waltham will be sent by the Business Office semiannually. Payment should be sent directly to my attention. Please also send a copy of your insurance binder naming UMass as an insured.

Please let me know if you have any questions regarding the license or invoice information.

Sincerely,

Evan Pacosa

College of Natural Sciences

Grand Running

**Business Office** 



### 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at <u>rooms 201, 202, 211, & 212.</u>

### 3. PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: The office will be used for administrative functions related to the mission of the organization.

Specific rules governing access to and use of these facilities are attached as **Exhibit B** and are binding upon both parties.

#### 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use.

### 5. TERM

Term of Agreement: July 1, 2018 to December 31, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

### 6. HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

### 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

\$10,000.00

### 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the

issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

### 9. <u>ALTERATION OF THE PREMISES</u>

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as **Exhibit C**. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

### 10. <u>LICENSEE'S EQUIPMENT</u>

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

### 11. UTILITIES

The University shall provide janitorial services for common areas of the buildings and general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

### 12. CONDUCT OF LICENSEE

# Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by

duly designated personnel of the University.

### Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

### Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

### Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in **Exhibit B.** 

### Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

### Cost of Operations

Except as otherwise expressly set forth in this Agreement. Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

### Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

### Hazardous Materials

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert

Schrader.

### Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement. Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

### Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

### 13. INDEMNIFICATION

Not Applicable

### 14. RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage caused by any act of Licensee's invitees or members of the general public.

### 15. INSURANCE

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

- A. Comprehensive public liability insurance in an amount as required by Massachusetts law.
- B. Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an amount as required by Massachusetts law.

- Workers Compensation Insurance covering Licensee's employees upon the Premises in such amounts as are required by law.
- D. Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as **Exhibit D**.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

### 16. ASSIGNMENT

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

### 17. RIGHTS OF UNIVERSITY AND AGENCY TO ENTER

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

### 18. TERMINATION

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause</u>. Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. For Cause. If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails

to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.

C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18. Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

### 19. NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

### 20. NON-DISCRIMINATION

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in employment.

### 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

### 22. MISCELLANEOUS PROVISIONS

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver is in writing and is signed by the party to be charged.

This Agreement is to take effect as a sealed instrument.

The following exhibits and attachments are made a part of this Agreement for all purposes:

Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee

Exhibit B - Specific Rules Governing Access and Use of Facility

Exhibit C - Schedule of Permitted Alterations and Improvements

X Exhibit D - Insurance Certificate(s)

### AGREED AND ACCEPTED

UNIVERSITY OF MASSACHUSETTS:

The

Signature

Joe Shoenfeld, Associate Director Center for Agriculture, Food and the Environment University of Massachusetts

8/27/14

Authorized Signature

Laurie Caldwell, Executive Director Boston Area Gleaners

9/5/18

Date

Exhibit B Use of Grounds and Land at UMass Waltham, 240 Beaver Street, Waltham, Mass.

### Specific Rules Governing Access To and Use of Facility

The following rules apply to use of the facility. All communications related to compliance with use rules and requests for permitted variances should be directed to Facility Manager (Tony Mazzeo) at the facility.

#### **General Rules:**

**Civility and Adherence to Rules:** Licensees are responsible for actions of their staff, guests and general public invited onto premises. Licensee is responsible for ensuring compliance with all facility rules.

**Hours of Operation:** Facility is open to licensees and their guests. The building is accessible from 6 AM-11 PM. Outside grounds are accessible from 6 AM till dark.

**Parking:** Parking is generally available in lots surrounding the building. No parking is allowed on the grass without prior approval. No vehicles are to be left overnight without prior approval.

**Persons Authorized to Have Access to Facility:** Each licensee is to provide to the Facility Manager a list of persons who will have regular access to the facility. All persons having regular access to the building must be over the age of 18. For persons utilizing space within the buildings this list will specifically identify those who are to receive building keys.

**Special Events:** Special events, such as plant sales, shows, educational programs and community events, which will use additional areas of the facility are permitted, subject to the approval of the University. Use of the facility can be scheduled through the Facility Manager. Additional fees may be charged to cover related costs to the University, such as staff time, rubbish removal, etc.

#### Operational Rules for Organizations Using the Grounds and Land

Facility Access: The grounds are open to licensees from 6 AM - dark. Cars are to be driven onto grass areas only to load and unload materials or for handicapped access. Parking areas for handicapped access will be identified in advance.

**Staff Services:** University staff are responsible for operation and maintenance of the facility. University staff do not provide plant production or administrative services. Each organization must provide their own labor and related services.

Rubbish and Organic Materials Removal: Licensee is responsible for removing rubbish and recyclable materials to dumpsters and/or receptacles for recycling. Plant waste and related organic materials are to be discarded in areas identified by the facility manager.

Site Maintenance & Appearance: Assigned area must appear neat, clean, and orderly throughout the year. Refuse cannot be left at the site. End of the season clean-up is required. Details for clean-up and closing of land operations will be provided.

Water and Utilities: Water is generally provided to each site. Water conservation must be practiced. Water leaks are to be reported to the Facility Manager. All groups using more than an acre of land and the community garden group (GROW) will provide their own water meter in order to monitor use. The University will limit water use as deemed necessary.

Alterations and Changes in Use of the Land: The land can only be used for the purpose stated in the application form and Agreement. Any changes in use or changes to the land or landscape must be requested in writing to the Facility Manager. This includes pruning any surrounding trees or shrubs and adding structures, fencing, trellises or related items.

**Signage:** Small descriptive signs are to be posted at the site, identifying the organization, use of the land (purpose) and contact person for further information.

Contacts and Communications: All issues related to building and facility use should be brought to the attention of the Facility Manager, Tony Mazzeo.

Joe Shoenfeld Associate Director, UMass Center for Agriculture, Food and the Environment July, 2018

# ACORD

# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 08/01/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

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Boston Area Gleaners Attn: Laurie Caldwell 240 Beaver Street Waltham MA 02452 USA			Authorized Representative  Ann. Bish. Services, Northwest. Inc.				

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ACORD 25 (2016/03)

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**UMass Extension** Mass. Water Resources Research Center Mass. Agricultural Experiment Station **UMass Research and Education Farms** 

Office of the Director • Stockbridge Hall • 80 Campus Center Way • Amherst, MA 01003-9246 • p: 413.545.4500 • f: 413.545.6555 • ag.umass.edu

October 15, 2018

Ms. Ailene Orlando c/o Green Rows of Waltham 30 Clark Lane Waltham, MA 02451

Dear Ailene,

Enclosed please find a License agreement for two acres of land at Waltham for the period July 1, 2018, -December 31, 2019.

Please note that there is a copy of Exhibit B attached to this agreement. Please note that the only substantive change to this document from the past is the addition, in the fourth rule listed, of the sentence: "All persons having regular access to the building must be over the age of 18."

The fee is \$600 per acre or a portion thereof. The total is \$1,800.00 for the 18 month period.

Please sign and return one copy of the license agreement to me along with a copy of insurance certificates for liability and workman's compensation (if applicable). Sending by signed PDF is OK. An invoice will then be sent by our business office. We will invoice in three installments on July 1st and December 31st.

Please let me know if you have any questions regarding the license or invoice information.

Sincerely,

Evan Pacosa

College of Natural Sciences

Evan, Parosul

**Business Office** 

Joe Shoen feld @ CNS. UMASS. edu 413-545-5309

C- 413-575-5455



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# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of office space at the UMass Eastern Massachusetts Outreach Center. This agreement is between <u>Green Rows of Waltham</u> (hereinafter Licensee), a <u>community organization</u>, and the University of Massachusetts (hereinafter referred to as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver Street in Waltham and further described in Section 2 of this Agreement; and

WHEREAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

### 1. <u>REFERENCE DATA:</u>

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee:

Ailene Orlando c/o Green Rows of Waltham 30 Clark Lane Waltham, MA 02451

Premises: 2 acres of farm land.

Permitted Use: Use the land as a community garden for local residents, especially those who have no access to a garden.

Consideration to be Paid by Licensee: \$1,800.00 per year.

### 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at <u>Northwest area of field</u>, south side of Beaver Street.

### 3. PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: Use of land for a community garden.

Specific rules governing access to and use of these facilities are attached as **Exhibit B** and are binding upon both parties.

# 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use. •

### 5. TERM

Term of Agreement: July 1, 2018 to December 31, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

### 6. HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

### 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

\$1,800.00

### 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the

issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

### 9. ALTERATION OF THE PREMISES

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as **Exhibit C**. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

### 10. LICENSEE'S EQUIPMENT

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

### 11. UTILITIES

The University shall provide janitorial services for common areas of the buildings and general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

### 12. CONDUCT OF LICENSEE

### Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by

duly designated personnel of the University.

Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in Exhibit B.

Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

Cost of Operations

Except as otherwise expressly set forth in this Agreement, Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

Hazardous Materials

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert

Schrader.

Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement, Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

### 13. INDEMNIFICATION

Not Applicable

## 14. RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage caused by any act of Licensee's invitees or members of the general public.

### 15. INSURANCE

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

- A. Comprehensive public liability insurance in an amount as required by Massachusetts law.
- B. Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an amount as required by Massachusetts law.

- C. Workers Compensation Insurance covering Licensee's employees upon the Premises in such amounts as are required by law.
- D. Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as **Exhibit D**.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

### 16. ASSIGNMENT

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

# 17. RIGHTS OF UNIVERSITY AND AGENCY TO ENTER

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

### 18. TERMINATION

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause</u>. Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. For Cause. If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails

to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.

C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18, Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

### 19. NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

### 20. NON-DISCRIMINATION

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in employment.

### 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

## 22. <u>MISCELLANEOUS PROVISIONS</u>

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver is in writing and is signed by the party to be charged.

This Agreement is to take effect as a sealed instrument.

The following exhibits and attachments are made a part of this Agreement for all purposes:

Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee

Exhibit B - Specific Rules Governing Access and Use of Facility

Exhibit C - Schedule of Permitted Alterations and Improvements

Exhibit D - Insurance Certificate(s)

### AGREED AND ACCEPTED

**UNIVERSITY OF MASSACHUSETTS:**  LICENSEE:

Joe Shoenfeld, Associate Director Center for Agriculture, Food and the Environment University of Massachusetts

Ailene Orlando Green Rows of Waltham - Leasurer

10/25/18 Date

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Exhibit B Use of Grounds and Land at UMass Waltham, 240 Beaver Street, Waltham, Mass.

### Specific Rules Governing Access To and Use of Facility

The following rules apply to use of the facility. All communications related to compliance with use rules and requests for permitted variances should be directed to Facility Manager (Tony Mazzeo) at the facility.

#### **General Rules:**

**Civility and Adherence to Rules:** Licensees are responsible for actions of their staff, guests and general public invited onto premises. Licensee is responsible for ensuring compliance with all facility rules.

**Hours of Operation:** Facility is open to licensees and their guests. The building is accessible from 6 AM-11 PM. Outside grounds are accessible from 6 AM till dark.

**Parking:** Parking is generally available in lots surrounding the building. No parking is allowed on the grass without prior approval. No vehicles are to be left overnight without prior approval.

Persons Authorized to Have Access to Facility: Each licensee is to provide to the Facility Manager a list of persons who will have regular access to the facility. All persons having regular access to the building must be over the age of 18. For persons utilizing space within the buildings this list will specifically identify those who are to receive building keys.

**Special Events:** Special events, such as plant sales, shows, educational programs and community events, which will use additional areas of the facility are permitted, subject to the approval of the University. Use of the facility can be scheduled through the Facility Manager. Additional fees may be charged to cover related costs to the University, such as staff time, rubbish removal, etc.

### Operational Rules for Organizations Using the Grounds and Land

**Facility Access:** The grounds are open to licensees from 6 AM - dark. Cars are to be driven onto grass areas only to load and unload materials or for handicapped access. Parking areas for handicapped access will be identified in advance.

**Staff Services:** University staff are responsible for operation and maintenance of the facility. University staff do not provide plant production or administrative services. Each organization must provide their own labor and related services.

**Rubbish and Organic Materials Removal:** Licensee is responsible for removing rubbish and recyclable materials to dumpsters and/or receptacles for recycling. Plant waste and related organic materials are to be discarded in areas identified by the facility manager.

**Site Maintenance & Appearance:** Assigned area must appear neat, clean, and orderly throughout the year. Refuse cannot be left at the site. End of the season clean-up is required. Details for clean-up and closing of land operations will be provided.

Water and Utilities: Water is generally provided to each site. Water conservation must be practiced. Water leaks are to be reported to the Facility Manager. All groups using more than an acre of land and the community garden group (GROW) will provide their own water meter in order to monitor use. The University will limit water use as deemed necessary.

Alterations and Changes in Use of the Land: The land can only be used for the purpose stated in the application form and Agreement. Any changes in use or changes to the land or landscape must be requested in writing to the Facility Manager. This includes pruning any surrounding trees or shrubs and adding structures, fencing, trellises or related items.

**Signage:** Small descriptive signs are to be posted at the site, identifying the organization, use of the land (purpose) and contact person for further information.

**Contacts and Communications:** All issues related to building and facility use should be brought to the attention of the Facility Manager, Tony Mazzeo.

Joe Shoenfeld Associate Director, UMass Center for Agriculture, Food and the Environment July, 2018



# **CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YY 06/25/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THE CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICICAL PRESENTATIVE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZ PRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

PRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER. IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endors If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement this certificate does not confer rights to the certificate holder in lieu of such endorsement(s). CONTACT NAME: PHONE (A/C, No, Ext): (888) 661-3938 E-MAIL **BIKOFSKY INSURANCE AGENCY INC** (A/C, No): (877) 872-7604 793 WASHINGTON ST **NEWTONVILLE, MA 02460** ADDRESS: service.center@travelers.com (888) 661-3938 INSURER(S) AFFORDING COVERAGE NAIC # INSURER A: THE TRAVELERS INDEMNITY COMPANY OF CONNECTICUT INSURED INSURER B **GROW-GREEN ROWS OF WALTHAM** INSURER C: C/O AILENE ORLANDO **30 CLARK LANE** INSURER D WALTHAM, MA 02451 INSURER E INSURER F: **COVERAGES CERTIFICATE NUMBER: 123639519402671 REVISION NUMBER:** THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERK INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH TH CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERM EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. INSF ADDI SUBR POLICY EFF **POLICY EXP** TYPE OF INSURANCE **POLICY NUMBER** INSD WVD LIMITS (MM/DD/YYYY) (MM/DD/YYYY) 660-779X2799-19 Α X 08/02/2019 08/02/2020 X COMMERCIAL GENERAL LIABILITY EACH OCCURRENCE DAMAGE TO RENTED \$1,000,000 CLAIMS-MADE X OCCUR \$100,000 PREMISES (Ea occurrence) MED EXP (Any one person) \$5,000 \$1,000,000 PERSONAL & ADV INJURY GEN'L AGGREGATE LIMIT APPLIES PER: GENERAL AGGREGATE \$2,000,000 PRO-X POLICY JECT \$2,000,000 PRODUCTS - COMP/OP AGG OTHER: COMBINED SINGLE LIMIT (Ea accident) **AUTOMOBILE LIABILITY** BODILY INJURY (Per person) ŝ ANY AUTO OWNED AUTOS ONLY SCHEDULED AUTOS BODILY INJURY (Per accident) \$ HIRED AUTOS ONLY NON-OWNED AUTOS ONLY PROPERTY DAMAGE (Per accident) Ś **UMBRELLA LIAB** OCCUR EACH OCCURRENCE EXCESS LIAB CLAIMS-MADE AGGREGATE Ś DED RETENTION \$ Ś WORKERS COMPENSATION OTH-N/A PER STATUTE AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? E.L. EACH ACCIDENT (Mandatory in NH) E.L. DISEASE - EA EMPLOYEE If yes, describe under DESCRIPTION OF OPERATIONS below E.L. DISEASE - POLICY LIMIT DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) AS RESPECTS TO GENERAL LIABILITY, CERTIFICATE HOLDER IS ADDITIONAL INSURED - MANAGERS OR LESSORS OF PREMISES, CG 20 11, FOR THE FOLLOWING LOCATION: BEAVER STREET, WALTHAM, MA 02451 CERTIFICATE HOLDER **CANCELLATION** UMASS EXTENSION, UNIVERSITY OF SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFO **MASSACHUSETTS** THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED 101 UNIVERSITY DRIVE ACCORDANCE WITH THE POLICY PROVISIONS. AMHERST, MA 01003 **AUTHORIZED REPRESENTATIVE** Many Wellelman

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# FIRST EXTENSION OF LICENSE AGREEMENT

This First Extension of License Agreement ("First Extension") is made on <u>April 30, 2020</u> by and between the University of Massachusetts Amherst ("University") and Green Rows of Waltham ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. Section 1 (Reference Data) of the Agreement shall be modified by deleting the Mailing Address of the University currently listed and replacing same with: "Steven Goodwin, Whitmore Administration Building Room 347, 181 Presidents Drive, Amherst, MA 01003".
- 2. TERM: The term of the Agreement shall be extended through December 31, 2020.
- 3. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of One Thousand Two Hundred and 00/100 Dollars (\$1,200.00), payable in advance in monthly installments of One Hundred Dollars (\$100.00) per month.
- 4. Section 12 (Surrender of Premises) is hereby amended by deleting the following language in its entirety: "However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land umusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises."
- 5. Section 12 (Hazardous Materials) is hereby amended to replace "Robert Schrader" with "the University's Environmental Health & Safety Office".
- 6. Section 15 (Insurance) is hereby amended to add the following to the end of the section: "All certificates of insurance from Licensee shall list the University as an additional insured."

- 7. Section 22 (Miscellaneous Provisions) is hereby amended by placing an "X" next to Exhibit A to indicate inclusion of same. Exhibit A showing land licensed is hereby attached and incorporated herein by reference.
- 8. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

# SECONDEX OF EXPENSION OF ECCAPETAL VENERAL ENTRY

This Second Extension of License Agreement ("Second Extension") is made on December 15, 2020 by and between the University of Massachusetts Amherst ("University") and Green Rows of Waltham ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged. University and Licensee agree as follows:

- 1. TERM: The term of the Agreement shall be extended on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days prior written notice to the other party.
- 2. FEE: In consideration of the right strangs of the amount of One Hundred Dollars (\$100.00) per month.
- 3. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

ISIGNATURE PAGE TO FOLLOW

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IN WITNESS WHEREOF, the parties hereto have executed this Second Extension as of the date The state of the s

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UNIVERSITY:

UNIVERSITY OF MASSACHSETTS

andrew P. Mangels

Name: Andrew P. Mangels | Planty | Prophetics | Prophetic

Title: Vice Chancellor for Administration and Finance

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Name: Ailene Orlando

Title: Tressurer

## AUDITING DEPARTMENT INFORMATION REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET

		UMass Paid	City Paid
Paid Date	Acct #	Amount	Amount
3/24/2021	1008001	177.38	
6/22/2021	1008001	102.38	
9/14/2021	1008001	252.38	
1/6/2022	1008001	182.84	
3/8/2022	1008001	102.38	
6/3/2022	1008001		\$252.38
9/2/2022	1008001		\$102.38
12/1/2022	1008001		<b>\$</b> 102.38
Total	1008001	\$817.36	<b>\$</b> 457.14
2/5/2021	1009001	73.34	
3/3/2021	1009001	36.67	
11/16/2021	1009001	2006.18	
5/20/2022	1009001		\$416.52
06/28/2022	1009001		\$101.24
8/12/2022	1009001		\$220.94
8/26/2022	1009001		\$256.50
9/23/2022	1009001	.71414	\$398.74
10/28/2022	1009001		\$247.61
11/18/2022	1009001		\$389.85
Total	1009001	\$2,116.19	\$2,031.40
2/5/2021	1010001	\$708.69	
3/10/2021	1010001	\$879.41	
4/6/2021	1010001	\$1,317.41	
3/4/2021	1010001	\$748.01	
5/25/2021	1010001	\$531.75	~-
8/3/2021	1010001	\$153.55	
8/11/2021	1010001	\$335.15	
8/31/2021	1010001	\$136.39	
12/6/2021	1010001	\$234.26	
12/14/2021	1010001	\$256.51	
1/6/2022	1010001	\$472.77	
2/23/2022	1010001	\$603.11	
3/8/2022	1010001	\$975.18	
???	1010001		\$577.45
???	1010001		\$859.71
???	1010001		\$1,591.12
5/20/2022	1010001		\$2,142.91
6/28/2022	1010001		\$423.49
8/12/2022	1010001		\$300.19
8/26/2022	1010001		\$207.55
9/23/202	1010001		\$253.87
10/28/2022	1010001		\$230.71
11/18/2022	1010001		\$474.81
Total	1010001	\$7,352.19	\$7,061.81
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6/28/2022	1011001		\$110.00
8/12/2022	1011001		\$2,114.51 \$3,528.02
8/12/2022	1011001		\$10,151.07
9/23/2022	1011001		\$18,552.12
)/28/2022	1011001		\$5,528.27
11/18/2022	1011001		\$923.25
Total	1011001	\$0.00	\$40,907.24
Grand Total		\$10,285.74	\$50,457.59

# CITY OF WALTHAM

Billing.

Information

ACCOUNT NO.

1011001 DUE DATE

BJILLING DATE 11/1/2022

265

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WAI TUANAL TUANA T WALTHAM, MA 02454 10 0 1 0 2022 OFFICE HOURS

RETAIN THIS PORTION FOR YOUR RECOMBINES.

Mon - Fri.

ON OR BEFORE

C/O BUILDING DEPARTMENT

NOV -8 7072

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PREVIOUS BALANCE

TRANSACTION THIS PERIOD

AMOUNT

\$5,528.27

-\$5,528.27 \$0.00

CITY OF WALTHAM

WALTHAM MA 02452 119 SCHOOL ST.

11/30/22

\$923.25

SERVICE ADDRESS

11/30/22

240 BEAVER ST

STILL OUTSTANDING AS OF THE LIEN DATE OF NOVEMBER 15, 2022, WILL BE ADDED TO THE FY2023 TAX BILL PER GENERAL LAW ANY ACCOUNT WITH A BALANCE THAT WAS BILLED PRIOR TO SEPTEMBER 1, 2022 THAT IS

\*\*\*\*\*PLEASE NOTE\*\*\*\*

1-0-10895 1-0-10894

Actual

07/25/2022 06/27/2022

06/27/2022

1-0-10895

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303 334 857 1,245

APPROVED BY:

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ACCT.# 001-193-5200-5231

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1-0-10895

Reading History

Actual

Actual

10/24/2022

Serial No

MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

1-0-10894

6,345 Actual 7,867 Actual

10/25/2022 10/24/2022

7 112

29 28

Monthly Water Usage Current Bill Detail

Usage/Unit

AMOUNT

\$923.25 \$923.25

11,900

Sub-Total

Total

\$923.25

Current

Reading & Date

Usage .

#Days

**BALANCE FORWARD** 

PAYMENTS THROUGH 11/01/2022 ADJUSTMENTS THROUGH 11/01/2022



# CITY OF WALTHAM

WATER AND SEWER DIVISION

Billing Information

ACCOUNT NO. 1011001

Mon - Fri.

(781)314-3810

OFFICE HOURS

SERVICE ADDRESS

DUE DATE 10/31/22

240 BEAVER ST

OCT 182022

RETAIN THIS PORTION FOR YOUR RECORDS

C/O BUILDING DEPARAMENT 119 SCHOOL ST DEPARTMENT

119 SCHOOL ST. WALTHAM MA 02452

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CITY OF WALTHAM

10/31/22

PAYMENTS THROUGH 10/03/2022 ADJUSTMENTS THROUGH 10/03/2022 BALANCE FORWARD PREVIOUS BALANCE TRANSACTION THIS PERIOD ON OR BEFORE \$5,528.27 -\$18,552.12 \$0.00 AMOUNT \$18,552.12

	33	140	05/28/2022	3,936 Actual	1-0-10894
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	30	208	06/27/2022		1-0-10894
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	28	542	07/25/2022		1-0-10895
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	31	334	09/26/2022		1-0-10894
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		ADVANCE	781-314-3810 IN	MOVING? PLEASE CALL 781-314-3810 IN ADVANCE	NINOW

Sub-Total

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\$5,528.27 \$5,528.27

Usage/Unit 63,700

<u>AMOUNT</u> \$5,528.27

STILL OUTSTANDING AS OF THE LIEN DATE OF NOVEMBER 15, 2022, WILL BE ADDED TO THE FY2023 TAX BILL PER GENERAL LAW \*\*\*\*\*PLEASE NOTE\*\*\*\* ANY ACCOUNT WITH A BALANCE THAT WAS BILLED PRIOR TO SEPTEMBER 1, 2022 THAT IS

10/3/2022

BILLING DATE

BILLING DATE 9/1/2022



## WATER AND SEWER DIVISION CITY OF WALTHAM

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

> Information Billing

(781)314-3810

ACCOUNT NO. 1011001

DUE DATE 09/30/22

SERVICE ADDRESS

240 BEAVER ST

8:30am to 4:30pm OFFICE HOURS Mon - Fri.

RETAIN THIS PORTION FOR YOUR RECORDS

C/O BUILDING DEPARTMEN SEP 13 2022

CITY OF WALTHAM

WALTHAM MA 02452 119 SCHOOL ST.

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**BALANCE FORWARD** 

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	33	113	05/28/2022	Actual	5,849	1-0-10895	
H(C).#100	30	208	06/27/2022	Actual	4,144	1-0-10894	
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	_	ADVANCE	MOVING? PLEASE CALL 781-314-3810 IN ADVANCE	<b>EASE CALL 78</b>	/ING? PLI	MOV	

Usage 1-193-5200-5231 -00-93 Sub-Total Usage/Unit 210,200 Total \$18,552.12 \$18,552.12 \$18,552.12 AMOUNT

STILL OUTSTANDING AS OF THE LIEN DATE OF NOVEMBER 15, 2022, WILL BE ADDED TO THE FY2023 TAX BILL PER GENERAL LAW \*\*\*\*\*PLEASE NOTE\*\*\*\* ANY ACCOUNT WITH A BALANCE THAT WAS BILLED PRIOR TO SEPTEMBER 1, 2022 THAT IS

271

BILLING DATE 8/1/2022



## WATER AND SEWER DIVISION CITY OF WALTHAM

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing

ACCOUNT NO. 1011001

SERVICE ADDRESS

DUE DATE 08/31/22

240 BEAVER ST

Information

OFFICE HOURS Mon - Fri.

(781)314-3810

RE30am to 4:30pm

AUG 172022

RETAIN THIS PORTION FOR YOUR RECORDS

C/O BUILDING DEPARTMENT

WALTHAM MA 02452 119 SCHOOL ST

ANYTHAM I CHAMBANA

CITY OF WALTHAM

ON OR BEFORE 08/31/22

\$13,679.09

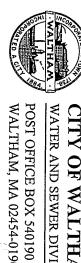
PREVIOUS BALANCE PAYMENTS THROUGH 08/01/2022 ADJUSTMENTS THROUGH 08/01/2022 **BALANCE FORWARD** TRANSACTION THIS PERIOD AMOUNT \$3,528.02 \$3,528.02

\$0.00

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\		2/2	206	10/27/2021		1_0_10804
7		343	546	10/27/2021		1-0-10895
•	)	180		04/25/2022		1-0-10894
CONTO	4((1.# VV)-120-22VV	180	<b>,</b>	04/25/2022		1-0-10895
מס ייי פנכז	ACCT # 001_103_5300	33	140	05/28/2022		1-0-10894
	1	33	113	05/28/2022	5,849 Actual	1-0-10895
	ALL LONG DE LA	30	208	06/27/2022		1-0-10894
	ADDDOVICO DV.	30	204	06/27/2022		1-0-10895
۱,		28	615	07/25/2022		1-0-10894
,		28	542	07/25/2022	6,595 Actual	1-0-10895
	) 2 元				Reading History	
Total \$13,679.09						
Sub-Total \$10,151.07		28	542	07/25/2022	6,595 Actual	1-0-10895
115,700 \$10,151.07	age	28	615	07/25/2022	Current 4,759 Actual	1-0-10894
Usage/Unit AMOUNT	Current Bill Detail	#Days	Usage		Reading & Date	Serial No

On-Line Bill Pay is available through the City of Waltham Website. Click the link and follow the prompts: http://www.city.waltham.ma.us/treasurer-collector-department/pages/online-payment



# CITY OF WALTHAM

WATER AND SEWER DIVISION

Billing Information

(781)314-3810

ACCOUNT NO.

1011001

DUE DATE 07/29/22

> BILLING DATE 7/1/2022

> > 261

SERVICE ADDRESS 240 BEAVER ST

WALTHAM, MA 02454-0190 OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

RETAIN THIS PORTION FOR YOUR RECORDS

C/O BUILDING DEPARTMENT
119 SCHOOL ST.
WAI THAM MA 02/52
BV: CITY OF WALTHAM WALTHAM MA 02452

Sashr.

07/29/22

PAYMENTS THROUGH 07/01/2022 ADJUSTMENTS THROUGH 07/01/2022 **BALANCE FORWARD** PREVIOUS BALANCE TRANSACTION THIS PERIOD ON OR BEFORE pa + 126 \$5,642.53 AMOUNT \$2,114.51 \$2,114.5 \$0.00

MOVING? PLEASE CALL 781-314-3810 IN ADVANCE  No Reading & Date Usage #Days	erial No R	MOVING? P
I I	Reading & Date	LEASE CALL 781-314-3810 I
I I	Usage	N ADVANCE
	#Days	

	-	7	343	405	10/27/2021		1-0-10894
			343	546	10/27/2021	5,735 Historic	1-0-10895
	3-5200-5231-00-10	- / ACCT.# UDI-19	180	<b>,</b>	04/25/2022		1-0-10894
		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	180		04/25/2022		1-0-10895
		)	ų. ü	140	05/28/2022		1-0-10894
	DIWE VI	APPROVED BY:	33./	113	05/28/2022		1-0-10895
		3	90 22	208	06/27/2022		1-0-10894
	25	The second of th	ъ. 	204	06/27/2022	6,053 Actual	1-0-10895
			9-4-maga			Reading History	
	Total \$5,642.53	1					
	Sub-Total \$3,528.02		<u>ي</u>	204	00/2//2022	o,oss Acidal	1-0-10075
"	11,200 00 J.J. 2011T	vironimi) ii mor Osugo	30	208	06/27/2022	4,144 Actual	1-0-10894
	- 1F	Monthly Water Heage				Current	
	I leage/I lnit	Current Bill Detail	#Days	Usage		Reading & Date	Serial No

On-Line Bill Pay is available through the City of Waltham Website. Click the link and follow the prompts: http://www.city.waltham.ma.us/treasurer-collector-department/pages/online-payment

## WATER AND SEWER DIVISION CITY OF WALTHAM

WALTHAM, MA 02454-0190 POST OFFICE BOX 540190

Billing Information

ACCOUNT NO.

1011001

6/1/2022

DUE DATE 06/30/22

OFFICE HOURS

(781)314-3810

SERVICE ADDRESS

JUN 3 0 2822 RETAIN THIS PORTION FOR YOUR RECORDS ON OR 240 BEAVER ST

06/30/22

CITY OF WALTHAM
C/O BUILDING DEPARTMENT

WALTHAM MA 02452 119 SCHOOL ST.

\$2,114.51

AY BEFORE	Ψ2, 11, 10, 1
TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$110.00
PAYMENTS THROUGH 06/01/2022	-\$110.00
ADJUSTMENTS THROUGH 06/01/2022	\$0.00
BALANCE FORWARD	\$0.00

Serial No MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

1-0-10894 1-0-10895

Reading History 5,849 Actual 3,936 Actual 5,736 Actual 3,796 Actual 5,735 Historic 3,795 Historic 3,936 Actual 5,849 Actual Reading & Date Historic Historic 05/28/2022 05/28/2022 04/25/2022 04/25/2022 05/28/2022 05/28/2022 10/27/2021 Usage 113 140 1 1 546 405 140 113 #Days 33 180 180 343 343 33 33 Monthly Water Usage Current Bill Detail APPROVED BY: Sub-Total Usage/Unit 25,300 Total

<u>AMOUNT</u> \$2,114.51

\$2,114.51 \$2,114.51

1-0-10895 1-0-10894 1-0-10895 1-0-10894 1-0-10895

ACCT.# 001-193-5200-5231 - 00 - 93

On-Line Bill Pay is available through the City of Waltham Website. Click the link and follow the prompts: http://www.city.waltham.ma.us/treasurer-collector-department/pages/online-payment

36

BILLING DATE



# CITY OF WALTHAM

WALTHAM, MA 02454-0190 POST OFFICE BOX 540190 WATER AND SEWER DIVISION

> (781)314-3810 Information

8:30am to 4:30pm Mon - Fri.

RETAIN THIS PORTION FOR YOUR RECORDS

Billing

OFFICE HOURS

ACCOUNT NO. 1011001 DUEDATE BILLING DATE 5/2/2022

248

240 BEAVER ST

SERVICE ADDRESS

05/31/22

ON OR BEFORE

05/31/22

\$110.00

C/O BUILDING DEPARTMENT CITY OF WALTHAM 119 SCHOOL ST. WALTHAM MA 02452 P. Wyons

PAYMENTS THROUGH 05/02/2022

PREVIOUS BALANCE

TRANSACTION THIS PERIOD

AMOUNT

\$0.00 \$0.00 \$0.00

ADJUSTMENTS THROUGH 05/02/2022

MOVINGS DIFACE CALL 701

Visage   V

Current Bill Detail	BALANCE FORWARD
Usage/Unit	
A MOI PUT	\$0.00

A(C):# 001-193-300-301-100	MAPPROVED BY	う。うまれ		Current Bill Detail Monthly Water Usage
		Total	Sub-Total	<u>Usage/Unit</u> 200_
		\$110.00	\$110.00	AMOUNT \$110.00

On-Line Bill Pay is available through the City of Waltham Website. Click the link and follow the prompts: http://www.city.waltham.ma.us/treasurer-collector-department/pages/online-payment

## BUILDING DEPARTMENT INFORMATION REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET

						5/19/22 Grow Native Mass	DATE OWNER	STREET: 240 Beaver Street
						Erect temporary 20'x30' temporary tent P202241985 \$1,200.	PROPOSED WORK	101 NO:
						/ tent P202241985 \$1,200.	AMOUNT PLAN NO.	):

City of Waltham Application for Permit 119
School Street

MA 02451 Waltham, MA 02451

DATE RECEIVED HAM BLDG, DEPT.

	Telephon	e 781-314-3275		Received By:	Ju		
APPLICATION TO	CONSTRUCT, REPAIR	R, RENOVATE, CHANC	E THE USE OR DEMO	LISH A ONE OR TWO FA	AMILY DWELLING		
	^ ^	This Section For	r Official Use Only				
Building Permit Numb	en / / /	I III OCCION I O	Date Issued:				
				-1			
<del></del>	TY ALYN H.			- 1/10/00			
Signature:	MINIM				<u> </u>		
Building	Commissioner/Inspector	of Buildings		Date //	•		
SECTION 1 - SITE I		<u> </u>					
1.1 Property Address		£	1.2 Assessors Map &	Parcel Number:			
240 1	PANER ST						
- WALTA	MM MA		Map Number	Parcel Nu	mber		
	., , , , ,						
1.3 Zoning Information	on:		1.4 Property Dimens	ions:			
Zoning District	Proposed	Use	Lot Area (st)	Frontage (	7)		
1.6 Building Setbacks				3-1			
Front		Side	Yard	Rear	Yard		
Required	Proposed	Required	Proposed	Required	Proposed		
					roposed		
1.7 Water Supply (M.	G.L. c. 40, § 54)	1.5 Flood Zone Inform	nation:	1.8 Sewage Disposal S	vstem:		
Public [	Private	Zone: O	utside Flood Zone 🗌	Municipal On site disposal system			
SECTION 2 - PROPE	ERTY OWNERSHIP/A	UTHORIZED					
2.1 Owner of Record:							
GR	Pain Amt	ive ma.c	C DYORan	COD X			
Name (Print)	ii A	ike mas	/Address for Service/	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Hea	How Pru	Komala	Wolf with	121/100			
Signature		Telephone	y as cay con y	The state of			
2.2 Authorized Agent							
Name (Print)		•	Address	÷			
Signature		Telephone	V				
SECTION 3 – CONST	RUCTION SERVICES	S					
3.1 Licensed Construct	tion Supervisor:			Not Applicable			
'ATLANTIC	Text Ren	HOL IN	P.				
Licensed Construction S	lupervisor:	4 PORIA		License Number			
Address	·	71814	**************************************	<u> </u>			
12 mid	1/2 57.	Leoninote	Į	Expiration Date			
Signature Ray			974-534-2322				
	nprovement Contracto	1 diopnone	14.74.00 A-9297	Not Applicable			
no registered frome fr	nprovement contracte	•		Not Applicable []			
Company Name		***************************************		Registration Number			
Address				Expiration Date			
Signature		Telephone					

Be detail of the issuance of the building permit.		nsurance affidavit must be con		this application. Failure to provide this	affidavit will resul					
SECTION 5 - DESCRIPTION OF PROPOSED WORK (check all applicable)   New Construction	the denial of the issuance	of the building permit.	•							
Repair(s)	Signed Affidavit Attache	d Yes	No□							
Accessory Bldg.   Demolition   Other   Specify:   Temperally text	SECTION 5 – DESCRI	PTION OF PROPOSED WO	ORK (check all applicable	)						
Brief Description of Proposed Work:    Plant	New Construction	Existing Building	Repair(s)	Alteration(s)	Addition					
SECTION 6 - ESTIMATED CONSTRUCTION COSTS  Item	Accessory Bldg.	Demolition	Other Specify:							
SECTION 6 - ESTIMATED CONSTRUCTION COSTS  Item	temporary text									
SECTION 6 - ESTIMATED CONSTRUCTION COSTS  Item	Brief Description of Proposed Work:									
SECTION 6 - ESTIMATED CONSTRUCTION COSTS  Item	PL	ANT SA	le in	der text						
Item Estimated Costs (Dollars) to be Completed by permit applicant  1. Building		·	-IAA-	11 22422						
Item Estimated Costs (Dollars) to be Completed by permit applicant  1. Building				4 20%)0						
Item Estimated Costs (Dollars) to be Completed by permit applicant  1. Building		W								
Item Estimated Costs (Dollars) to be Completed by permit applicant  1. Building										
Item Estimated Costs (Dollars) to be Completed by permit applicant  1. Building	SECTION 6 – ESTIMA	TED CONSTRUCTION CO	STS							
1. Building 2. Electrical 2. Electrical 3. Plumbing 4. Mechanical (HVAC) 5. Fire Protection 6. Total = (1+2+3+4+5) Check Number  SECTION 7a — OWNER AUTHORIZATION — TO BE COMPLETED WHEN OWNERS AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT  I		Estimated Costs (I	Pollars) to be	Official Use O	nly					
2. Electrical  2. Electrical  (b) Estimated Total Cost of Construction from (6)  3. Plumbing  4. Mechanical (HVAC)  5. Fire Protection  6. Total = (1+2+3+4+5)  SECTION 7a — OWNER AUTHORIZATION — TO BE COMPLETED WHEN OWNERS AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT  I,	1 Duilding	Completed by perr		(a) Ruilding Permit Fee						
Construction from (6)	1. Dunding	11.21	0-							
3. Plumbing 4. Mechanical (HVAC) 5. Fire Protection 6. Total = (1+2+3+4+5)  SECTION 7a - OWNER AUTHORIZATION - TO BE COMPLETED WHEN OWNERS AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT  I,	2. Electrical	1,3								
4. Mechanical (HVAC)  5. Fire Protection  6. Total = (1+2+3+4+5)  SECTION 7a - OWNER AUTHORIZATION - TO BE COMPLETED WHEN OWNERS AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT  I,	3. Plumbing									
5. Fire Protection 6. Total = (1+2+3+4+5)  SECTION 7a - OWNER AUTHORIZATION - TO BE COMPLETED WHEN OWNERS AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT  I,										
SECTION 7a – OWNER AUTHORIZATION – TO BE COMPLETED WHEN OWNERS AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT  I,				-	2/4					
SECTION 7a – OWNER AUTHORIZATION – TO BE COMPLETED WHEN OWNERS AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT  I,	6. Total = (1+2+3+4+5)	7 20	200	Check Number	1000					
I,	SECTION 7a – OWNER AUTHORIZATION – TO BE COMPLETED WHEN									
hereby authorize	OWNERS AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT									
hereby authorize	I,									
Signature of Owner  Signature of Owner  SECTION 7b - OWNER/AUTHORIZED AGENT DECLARATION  I,	, as similar or the daylest j									
Signature of Owner  SECTION 7b - OWNER/AUTHORIZED AGENT DECLARATION  I, Barry / Port a nation on the foregoing application are true and accurate, to the best of my knowledge and b Signed under the pains and penalties of perjury.  Print Name  Bany Park  Bany Park  April 2012  Print Name	netecty audiorize									
I, BRRY ROYLES AGENT DECLARATION  I, BRRY ROYLES AGENT DECLARATION  I, BRRY ROYLES AGENT DECLARATION  I, As Owner/Authorized Agent Agent Hereby declare that the statements and information on the foregoing application are true and accurate, to the best of my knowledge and be Signed under the pains and penalties of perjury.  Print Name  Bany Park	my contain, in an matters totalized to work authorized by this contains permit application.									
I, BRRY ROYLES AGENT DECLARATION  I, BRRY ROYLES AGENT DECLARATION  I, BRRY ROYLES AGENT DECLARATION  I, As Owner/Authorized Agent Agent Hereby declare that the statements and information on the foregoing application are true and accurate, to the best of my knowledge and be Signed under the pains and penalties of perjury.  Print Name  Bany Park										
I, BARRY Reset and information on the foregoing application are true and accurate, to the best of my knowledge and be Signed under the pains and penalties of perjury.  13 412127 Reset 4  Print Name  Bany Park  April 20  Print Name				Date						
Hereby declare that the statements and information on the foregoing application are true and accurate, to the best of my knowledge and b Signed under the pains and penalties of perjury.  13 41212 Penalth  Print Name  Bany Penalth  6/18/22										
Signed under the pains and penalties of perjury.  13 A12127 Perch  Print Name  Bany Perk  6/18/22										
Print Name Bany Perks 6/18/22	•	,								
	Signed under the pains and	i penalties of perjury.								
	13 A	rry Perh	4							
	Print Name	Print Name								
Signature of Owner/Agent Date	Signature of Owner/Agent	- Juna		Data						

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## City of Waltham

## Massachusetts

Building Department

In accordance with the provisions of MGL c40.S	564 a condition
of Building Permit Number	is that the
debris resulting from this work shall be disposed	of in a properly
licensed solid waste disposal facility as defined by	MGL c111.S
150A.	

The debris will be disposed of in

Location of Facility

Signature of Permit Applicant

Date

## Certificate of Flame Resistance

REGISTERED APPLICATION CONCERN NO.

CAL GOMB 5-419.01

AZTEC TENTS 490 ALASKA AVENUE TORRANCE, CA 90503 (800)228-3687 Date treated or manufactured

08/28/2013

This is to certify that the materials described below hereof have been flame retardant treated (or are inherently nonlimmable).

FOR

Atlantic Tent Rental

12 Middle St.

Leominster, MA 01453



		Certification is hereby made that: (check "a" or "b")
	(a)	The articles described below this certificate have been treated with a flame retardant chemical approved and registered by the State Fire Marshal and that the application of said chemical was done in conformance with the laws of the State of California and the Rules and Regulations of the State Fire Marshal. Name of chemical used Chem. Reg. No Meathod of application
*	<b>(</b> b)	The articles described below hereof are made from a flame -resistant fabric or material registered and approved be the State Fire Marshal for such use; Fabric has been tested and passes NFPA701-96.  Trade name of flame-resistant fabric or material used Lambradod Fabric . Reg. No Frinci
	The	Flame Retardant Process Used WILL NOT Be Removed by Washing

David Bradley

Chuck Miller - President

Tal

Name of Applicator or Production Superintendent

CUSTOMER ORDER NO.

ITEMS MANUFACTURED:

20 X 30

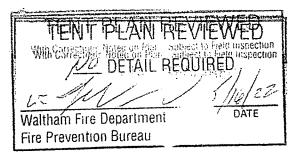


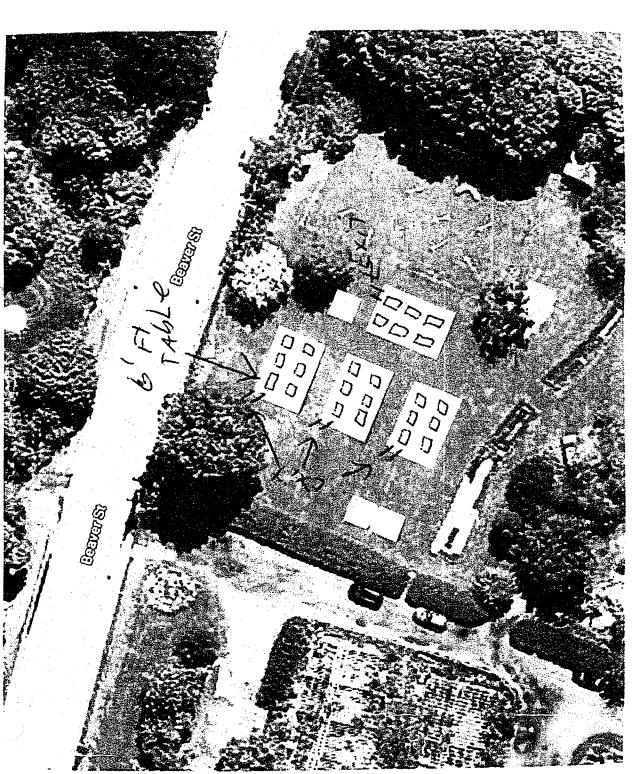
## The Commonwealth of Massachusetts Department of Industrial Accidents 1 Congress Street, Suite 100 Boston, MA 02114-2017

www.mass.gov/dia

Workers' Compensation Insurance Affidavit: Builders/Contractors/Electricians/Plumbus TO BE FILED WITH THE PERMITTING AUTHORITY.

Applicant Information	
Name (Business/Organization/Individual): ATLANTIC Test	Please Printegibly
Address: 12 middle st	CENT AL JAC
City/State/Zip: Leaminster my Phone #: 928	· 534~1271 ·
Are you an employer? Check the appropriate box: 01463	
1. Tam a employer with employees (full and/or part-time).*	Type of project (mired):
2. I am a sole proprietor or partnership and have no employees we drive 6	7. New construin
any capacity. [No workers' comp. insurance required.]	8. Remodeling
The more doing air work myself. [No workers' comp. insurance required.] †	9. Demolition
4. I am a homeowner and will be hiring contractors to conduct all work on my property. I will ensure that all contractors either have workers' compensation insurance or are sole	10 Building addin
proprietors with no employees.	11. Electrical region additions
5. I am a general contractor and I have hired the sub-contractors listed on the attached sheet.	12. Plumbing region additions
and nave employees and nave workers' comp. insurance.	13. Roof repairs
6. We are a corporation and its officers have exercised their right of exemption per MGL c. 152, §1(4), and we have no employees. [No workers' comp. insurance required.]	14. Other <u>Lemporsey</u>
*Any applicant that checks box #1 must also fill out the section below showing their workers' compensation † Homeowners who submit this affidavit indicating they are doing all work and then hire outside contractors ‡Contractors that check this box must attached an additional sheet showing the name of the sub-contractors are employees. If the sub-contractors have employees, they must provide their workers' comp. policy number.	policy information. must submit a new affidavitibiling such. nd state whether or not those size have
I am an employer that is providing workers' compensation insurance for my employe information.	Tel.
	es. Below is the policyal job site
Insurance Company Name: WESCO INS CO.	
	tion Date: 3/29/23
Job Site Address: 240 Beaver ST City/Sta	te/Zip:y n/than ma
Attach a copy of the workers' compensation policy declaration page (showing the n	olicy number and emilion data
radule to secure coverage as required under MGT c 152 825 A is a priminal relation	
The form of a Crop William Civil bensines in the form of a Crop Work of	
day against the violator. A copy of this statement may be forwarded to the Office of Invectorage verification.	estigations of the DIA missurance
I do hereby certify under the pains and penalties of perjury that the information provid	
Giometrico ( Dorac / )	iea above is true and cmct.
Date:	5/18/23
Phone #: 574-2322	
Official use only. Do not write in this area, to be completed by city or town official.	
City or Town:Permit/License #	
Issuing Authority (circle one):	
1. Board of Health 2. Building Department 3. City/Town Clerk 4. Electrical Ins	pector 5. Plumbing lector,
Contact Person:	
Contact Person: Phone #:	<u>.</u> i





there ARE no sidewalls So they can first anywhere

Every garden matters ~ Every landscape counts & UN LPR

Helene Sroat Office Manager Grow Native Massachusetts Monday, May 16, 2022 10:15:53 AM - Site map - Message (HTML)

## Certificate of Flame Resistance

REGISTERED APPLICATION CONCERN NO.

GAL GOMB F-419.01

AZTEC TENTS 490 ALASKA AVENUE TORRANCE, CA 90503 (800)228-3687 Date treated or manufactured

08/28/2013

This is to certify that the materials described below hereof have been flame retardant treated (or are inherently nonflam	mable)
---	--------

FOR

Atlantic Tent Rental

12 Middle St.

Leominster, MA 01453

Name of Applicator or Production Superintendent



		Certification is hereby made that	check "a" or "b")
	(a)	and registered by the State Fire Marshal a	e have been treated with a flame retardant chemical approved at the application of said chemical was done in confornia and the Rules and Regulations of the State Fire Marshal.  Chem. Reg. No.
*	(b) The	approved be the State Fire Marshal for suc Trade name of flame-resistant fabric or ma	tide from a flame -resistant fabric or material registered and huse; Fabric has been tested and passes NFPA701-96.  Terial used_lambard Fabric Reg. No
		David Bradley	Chuck Miller - President

CUSTOMER ORDER NO.
ITEMS MANUFACTURED:

20 X 30



## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 04/29/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED PRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

PORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

t:	is certificate does not confer rights to	o uis o the c	ertificate holder in lieu of st	le policy, certain p uch endorsementis	oncies may : 4).	require an endorsement	. A St	atement on
	DUCER CA LIC 0B29370		-925-798-3334	CONTACT				
	ewood Partners Insurance Center	r (BP	PIC)	PHONE	tha becare		925 6	70 EE21
	ncord Programs Group - Branch	15558	21	[A/C, No), Ext]: (A/C, No): 923.809.5531				
P.0	. Box 5668					rental@epicbrokers.	com	r
	1 A4EA4					RDING COVERAGE		NAIC#
	cord, CA 94524			INSURER A: ARCH I				11150
	RED antic Tent Rental Co.			INSURER B: WESCO	INS CO			25011
MUL	antic tent Rental Co.			INSURER C:				
12	Middle St.			INSURER D:				
				INSURER E:				i
Leo	minster, MA 01453			INSURER F:				
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588 Silver Street, Agawam. MA 01001 - tel 413.789.3530 - fax 413.789.2776 - www.ecsconsult.com

Received

OCT 13 2009

#### Via Certified Mail

Mayor Jeanette McCarthy City of Waltham 610 Main Street Waltham, MA 02452 October 7, 2009 Project No. 01-207783 Document No. 38303 Mayor's Offic

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Henry of Flating Co.

31.4 %

RE:

Parcel 1

240 Beaver Street Waltham, Massachusetts RTN 3-29048, 3-28049 & 3-28050

#### Dear Board of Selectmen:

On behalf of University of Massachusetts Environmental Compliance Services, Inc. (ECS) submitted a Response Action Outcome (Boiler House & Fly Ash Area) and Phase I Initial Site Investigation & Tier Classification to the Massachusetts Department of Environmental Protection (MassDEP) on October 5, 2009. A copy of the report can be obtained by contacting the Department of Environmental Protection, 205B Lowell Street, Wilmington, MA 01887. If you should have any questions concerning this submittal, please do not hesitate to contact our office.

Sincerely,

ENVIRONMENTAL COMPLIANCE SERVICES, INC.

Builteas

Bruce Tease, Ph.D, LSP, PG

Senior Environmental Professional

BET/kab

cc: Board of Health - Via Certified Mail

MassDEP - Via Certified Mail

## RESPONSES TO CONSOLIDATED PUBLIC WORKS REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET

## Michael L. J. Chiasson Director of Public Works

## CITY OF WALTHAM MASSACHUSETTS

November 2, 2022

Dear Occupants of 240 Beaver Street, Waltham MA:

The City of Waltham CPW Department is requesting that you provide us with a list of all your own personal property that is located or stored on the 240 Beaver Street site.

Please describe and list the personal property. Example, equipment, sheds, small buildings, shelters, tents, etc.

If there is any other occupant you are aware of other than those listed below, please advise me so I may send them a letter as well.

Thank you for your cooperation.

Sincerely,

Michael Chiasson

Director of CPW cc: Waltham

Waltham Fields Community Farm Boston Area Climate Experiment

Green Rows of Waltham

Grow Native Massachusetts Mass Farmers Market Waltham Land Trust

Healthy Waltham

From:

Stacey Daley <Stacey@communityfarms.org>

Sent:

Thursday, November 10, 2022 7:56 AM

То:

Chiasson, Michael

Subject:

Follow Up

**Attachments:** 

UMass-CFOWFCF Fully Executed Exhibit A.pdf

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Good morning Mike,

I thank you for our conversation yesterday and very much appreciate your time.

As mentioned, I am pleased to satisfy the City's inquiry and schedule time for a site walk with you and or Stu LaCrosse to review WFCF's infrastructure, locations and personal property at 240 Beaver. Pleased also to highlight items which do not belong to WFCF or any other prior licensed tenants of UMass.

As previously shared with Assessor Frank Craig, I have attached exhibit A from our most recent agreement with UMass which outlines with fairly decent scale, although not 100% accurate, our longstanding and previously approved site use.

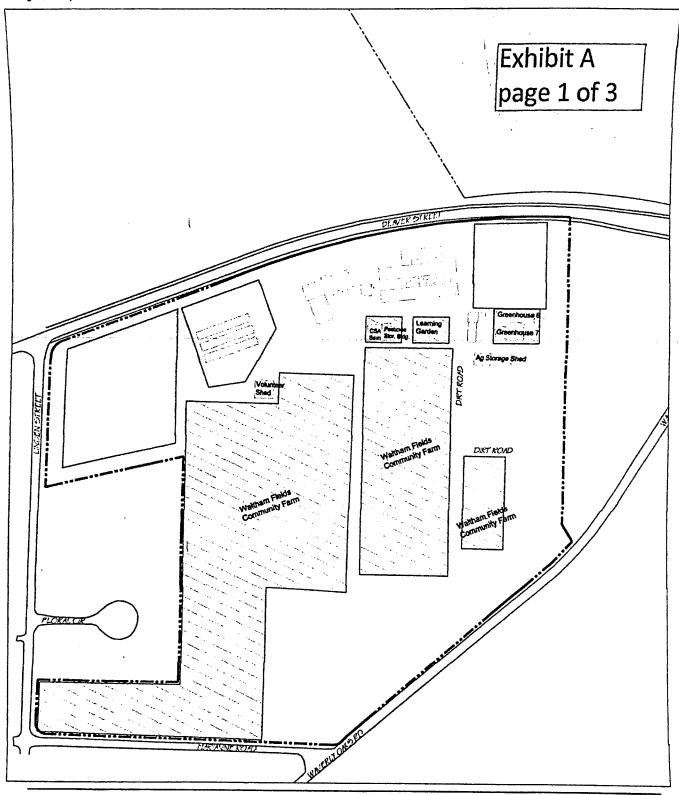
Looking forward to scheduling time together.

Thanks again.

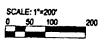
Stacey

Stacey Daley
Executive Director
Waltham Fields Community Farm
www.communityfarms.org
781-899-2403 Ext. 10
She, Her, Hers

<u>Support WFCF's Ride for Food Team and Food Access Programs at WFCF!</u> <u>Annual Meeting November 3, 2022</u>







WALTHAM STATION
COMMUNITY FARMS OUTREACH
EXHIBIT A - LICENSED LAND



1/13/2021 UMass Campus Planning

From:

Stacey Daley <Stacey@communityfarms.org>

Sent:

Wednesday, November 16, 2022 4:00 PM

To:

Chiasson, Michael

Cc:

LaCrosse, Stew

Subject:

Re: Follow Up

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Good afternoon Mike and Stew,

Hope you both are doing well this week.

I am following up to learn if we may be able to schedule a date for a site visit with CPW so that the City may acquire information on the personal property of each tenant at 240 Beaver Street.

We would very much like to support the CIty's request for information and hope to hear back from you so that we may schedule a date.

Thanks very much,

Sd

On Thu, Nov 10, 2022 at 7:56 AM Stacey Daley < Stacey@communityfarms.org > wrote: Good morning Mike,

I thank you for our conversation yesterday and very much appreciate your time.

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She, Her, Hers

<u>Support WFCF</u>'s <u>Ride for Food Team and Food Access Programs at WFCF!</u> <u>Annual Meeting November 3, 2022</u> Stacey Daley
Executive Director
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www.communityfarms.org
781-899-2403 Ext. 10
She, Her, Hers

<u>Support WFCF</u>'s <u>Ride for Food Team and Food Access Programs at WFCF!</u> <u>Annual Meeting November 3, 2022</u>

From:

Stacey Daley <Stacey@communityfarms.org>

Sent:

Wednesday, November 23, 2022 11:16 AM

To:

Chiasson, Michael

Cc:

LaCrosse, Stew; Colleen McKiernan

Subject:

Re: Follow Up

## CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Good morning Michael and Stew,

Following up on my emails on 11/10 and 11/16 and in regards to the correspondence postmarked 11/3/22 from the City to the non-profit tenants of 240 Beaver Street.

Mike, thank you for your time discussing the request. I seek a response and an opportunity to schedule a site visit with CPW so that we may share awareness of the operational areas long utilized and previously licensed to WFCF by UMass.

This is my third attempt to satisfy this request and hope we may set a time soon and before snowfall may hinder visibility of particular areas.

Looking forward to hear from you,

I wish you both a happy Thanksgiving and an opportunity for rest.

Be well, Stacey

On Wed, Nov 16, 2022 at 4:00 PM Stacey Daley < Stacey@communityfarms.org > wrote:

Good afternoon Mike and Stew,

Hope you both are doing well this week.

I am following up to learn if we may be able to schedule a date for a site visit with CPW so that the City may acquire information on the personal property of each tenant at 240 Beaver Street.

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Sd

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Looking forward to scheduling time together. Thanks again. Stacey

Stacey Daley
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www.communityfarms.org
781-899-2403 Ext. 10
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<u>Support WFCF</u>'s <u>Ride for Food Team and Food Access Programs at WFCF!</u> <u>Annual Meeting November 3, 2022</u>

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www.communityfarms.org
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<u>Support WFCF</u>'s <u>Ride for Food Team and Food Access Programs at WFCF!</u> <u>Annual Meeting November 3, 2022</u>

Stacey Daley
Executive Director
Waltham Fields Community Farm
www.communityfarms.org
781-899-2403 Ext. 10
She, Her, Hers

Support WFCF programs though our 2022 Annual Appeal!

From:

Dylan Sanders <sanders@sugarmanrogers.com>

Sent:

Thursday, December 1, 2022 2:25 PM

To:

Chiasson, Michael

Cc:

LaCrosse, Stew; Stacey Daley

Subject:

240 Beaver Street

**Attachments:** 

2022.12.01 Waltham Fields-Letter to Michael Chiasson (re 240 Beaver Street)

4890-3606-7393 v.1.pdf

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Dear Mr. Chiasson,

Please see the attached correspondence on behalf of Waltham Fields Community Farms.

Thank you,

**Dylan Sanders** 

617.227.3030 (O) | 617.549.5828 (M)



Sugarman, Rogers, Barshak & Cohen, P.C.

http://www.sugarmanrogers.com

Send us files of any size securely by clicking here: https://srbcfiletrans.sugarmanrogers.com/filedrop/upload

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If you received this transmission in error, please notify the sender by telephone (617-227-3030) or by reply e-mail and delete this message.



Sugarman, Rogers, Barshak & Cohen, P.C.

C. Dylan Sanders sanders@sugarmanrogers.com

December 1, 2022

By Email

Mr. Michael Chiasson Director of Public Works City of Waltham 165 Lexington Street Waltham, MA 02452-4638

Re:

240 Beaver Street, Waltham, Massachusetts

Dear Mr. Chiasson:

This firm represents Waltham Fields Community Farm ("WFCF"), a tenant at the former UMass Waltham Extension Station at 240 Beaver Street, Waltham. I am writing in response to your November 2, 2022 request to the occupants of 240 Beaver Street, including WFCF, to provide the Department of Public Works with a list of all personal property that is located or stored on the 240 Beaver Street.

As you know from your conversations and communications with Executive Director Stacey Daley, WFCF has offered to cooperate with and satisfy your request with a site walk with you or your designee, pointing out the location of WFCF's property, what portions of 240 Beaver Street are used or not used by WFCF, and what property on the site does not belong to WFCF. In addition to offering the site visit, Ms. Daley has shared with you the schedule from WFCF's last agreement with UMass outlining WFCF's approved uses of 240 Beaver Street.

WFCF looks forward to your reply and to promptly scheduling the site visit, which you may do directly with Ms. Daley.

Thank you.

Sincerely,

Dylan Sanders

C. Dylan Sanders

cc: Ms. Stacey Daley, Executive Director, WFCF CDS/kt

4890-3606-7393, v. 1

From:

Heather Pruiksma < hpruiksma@grownativemass.org >

Sent:

Monday, November 14, 2022 5:03 PM

To:

Chiasson, Michael

Subject:

Grow Native Massachusetts property at 240 Beaver St

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Dear Michael,

I hope you don't mind my reaching out via email. I wanted to better understand the request you mailed on November 2 to the tenants of 240 Beaver St, including Grow Native Massachusetts, to provide a list of personal property located or stored at the site.

From the context of the examples (equipment, sheds, small buildings, shelters, tents, etc) and the fact that the request comes from you at Waltham CPW and not from the Buildings Department, I assume you are only seeking information about structures and equipment exterior to the main building (in which our offices are located). If that is an accurate assumption, then I can easily let you know that Grow Native Massachusetts has one 8'x10' garden shed (installed by Sheds USA in 2016) with 4' ramp, located in the Rose Garden area, in which we have stored garden and plant sale tools such as wheelbarrows and plant sleds, shovels, shade tents, hand clippers, a motion sensor light (for plant sale security), plant sale signage, garden stakes, extension cords, and hoses. If required, I can compile a more precise inventory of the shed contents, but I was uncertain if this was the level of detail you seek.

The tenants' group (members of all six nonprofits based at 240 Beaver St) met last week, and we all agreed that the most effective way for each of us to clearly convey how we currently use the grounds here would be if you would accept an invitation for a site walk. I would be very happy to meet you here on a date convenient to you and show you the location of our shed, and how that relates to our use of outdoor space on this property. Please let me know if you would be able to fit a visit into your schedule.

All best,

Heather

Heather Pruiksma (she/her/hers) Executive Director Grow Native Massachusetts

Every garden matters ~ Every landscape counts ®

hpruiksma@grownativemass.org 781-790-8921 www.grownativemass.org

From:

Orians, Colin <Colin.Orians@tufts.edu>

Sent:

Wednesday, November 16, 2022 10:12 PM

To:

Chiasson, Michael; Bower, Brian

Cc:

Alden Griffith

Subject:

Boston Area Climate Experiment (BACE) at Waltham Field Station

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Dear Michael Chiasson and Brian Bower,

I understand the two of you are overseeing the next steps at the Waltham Field Station. We received your letter Mr. Chiasson regarding the infrastructure at the Boston Area Climate Experiment (BACE). Alden Griffith, copied, and I are the ones overseeing the ongoing experiments there. I am from Tufts and Alden Griffith is from Wellesley. We have both done a lot of work there and the current experiments are being done by Alden and by graduate and undergraduate students. In addition to using the structure for our climate-related research, we have lots of our supplies stored in the sheds.

We would very much appreciate the opportunity to discuss our work with you, and to introduce you to our facilities. Meeting in person would also help us better understand what information you are seeking. Brian, we do not use the building except to get water or use the restrooms.

Please let us know if you have any question.

Best Regards,

Colin Orians (and Alden Griffith)

Colin Orians
Professor of Biology and
Director of Environmental Studies
364 Robinson Hall
200 College Avenue
Tufts University
Medford, MA. 02155
colin.orians@tufts.edu

From:

Orians, Colin < Colin.Orians@tufts.edu>

Sent:

Thursday, November 17, 2022 4:33 PM

To:

Bower, Brian; Chiasson, Michael

Cc:

Alden Griffith

Subject:

Re: [External] RE: Boston Area Climate Experiment (BACE) at Waltham Field Station

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Dear Brian and Michael,

Thank you for writing so quickly. We did not realize this had anything to do with the RFP. I thought you had wanted to get a better handle on what we have at BACE.

Regardless, do let me know if you want to see it together and we will make time. Or perhaps a zoom call with the two of us would be warranted.

Also wanted to mention that our old contract with UMass was given to Frank Craig and that includes a rough map of BACE.

Best, Colin

CC: Alden

Colin Orians
Professor of Biology
364 Robinson Hall
200 College Ave
Medford, MA 02155
Tel: 617-627-3543
colin.orians@tufts.edu

From: Bower, Brian <bbower@city.waltham.ma.us>

Sent: Thursday, November 17, 2022 4:21 PM

To: Orians, Colin < Colin. Orians@tufts.edu>; Chiasson, Michael < mchiasson@city.waltham.ma.us>

Cc: Alden Griffith <agriffit@wellesley.edu>

Subject: [External] RE: Boston Area Climate Experiment (BACE) at Waltham Field Station

Colin,

This is in the process of an RFP once finalized you will hear from the City Purchasing agent.

Brian Bower City of Waltham Chief Building Inspector 781-314-3285 Office From: Orians, Colin <Colin.Orians@tufts.edu>
Sent: Wednesday, November 16, 2022 10:12 PM

To: Chiasson, Michael <mchiasson@city.waltham.ma.us>; Bower, Brian <bbower@city.waltham.ma.us>

Cc: Alden Griffith <agriffit@wellesley.edu>

Subject: Boston Area Climate Experiment (BACE) at Waltham Field Station

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Please let us know if you have any question.

Best Regards,

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364 Robinson Hall
200 College Avenue
Tufts University
Medford, MA. 02155
colin.orians@tufts.edu

Caution: This message originated from outside of the Tufts University organization. Please exercise caution when clicking links or opening attachments. When in doubt, email the TTS Service Desk at <a href="mailto:tte@tufts.edu">tt@tufts.edu</a> or call them directly at 617-627-3376.

From:

Sonja Wadman <swadman@walthamlandtrust.org>

Sent:

Tuesday, November 29, 2022 4:31 PM Chiasson, Michael; LaCrosse, Stew

To: Subject:

WLT Property @ 240 Beaver St.

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Hello Mike and Stew,

I hope you both are well. I apologize for my delay in getting back to you regarding the letter sent to occupants of the Field Station seeking a list of personal property. I understand Stacey Daley of Waltham Fields Community Farm and other here at 240 Beaver Street have invited you to the property for a tour of who owns what, and I am more than happy to join in that effort.

But the Waltham Land Trust has very little to show: two small offices on the first floor which contain two printers, stewardship supplies like trash bags, gloves, and poison icy wipes, a desk, a table, several hand-me-down chairs, and lots of paperwork.

We also have a small shed tucked under the emergency staircase in the back of the building. The shed contains tools and more stewardship supplies. It's basically falling apart and might not last the winter. We have purchased another shed, the same size, to replace it but have held off on installing it given the changes in property ownership.

Kindest regards, Sonja

From:

Rob Thompson < Rob@healthy-waltham.org >

Sent:

Friday, December 2, 2022 12:00 PM

To:

Chiasson, Michael

Subject:

Waltham Fields - Healthy Waltham

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

#### Michael,

I am reaching out to you as it is my understanding that the City of Waltham has asked for a listing of items at the Waltham Community farms.

Healthy Waltham has a leased refrigeration unit at the farm located next to the boiler building.

Please let me know any additional information that you need.

Best

Rob

Rob Thompson Chief Operations Officer Healthy Waltham 510 Moody St. Waltham, MA 02453 http://www.healthywaltham.org 614-638-7629 (cell)

From:

Heather Pruiksma < hpruiksma@grownativemass.org >

Sent:

Monday, November 14, 2022 5:03 PM

To:

Chiasson, Michael

Subject:

Grow Native Massachusetts property at 240 Beaver St

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All best,

Heather

Heather Pruiksma (she/her/hers) Executive Director Grow Native Massachusetts

Every garden matters ~ Every landscape counts ®

hpruiksma@grownativemass.org 781-790-8921 www.grownativemass.org

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Sent:

Wednesday, November 16, 2022 10:12 PM

To:

Chiasson, Michael; Bower, Brian

Cc:

Alden Griffith

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Professor of Biology and
Director of Environmental Studies
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colin.orians@tufts.edu

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Orians, Colin < Colin.Orians@tufts.edu>

Sent:

Thursday, November 17, 2022 4:33 PM

To:

Bower, Brian; Chiasson, Michael

Cc:

Alden Griffith

Subject:

Re: [External] RE: Boston Area Climate Experiment (BACE) at Waltham Field Station

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Best, Colin

CC: Alden

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Professor of Biology
364 Robinson Hall
200 College Ave
Medford, MA 02155
Tel: 617-627-3543
colin.orians@tufts.edu

From: Bower, Brian <br/>
<br/>
bbower@city.waltham.ma.us>

Sent: Thursday, November 17, 2022 4:21 PM

To: Orians, Colin < Colin. Orians@tufts.edu>; Chiasson, Michael < mchiasson@city.waltham.ma.us>

Cc: Alden Griffith <agriffit@wellesley.edu>

Subject: [External] RE: Boston Area Climate Experiment (BACE) at Waltham Field Station

Colin,

This is in the process of an RFP once finalized you will hear from the City Purchasing agent.

Brian Bower
City of Waltham
Chief Building Inspector
781-314-3285 Office

From: Orians, Colin <Colin.Orians@tufts.edu>
Sent: Wednesday, November 16, 2022 10:12 PM

To: Chiasson, Michael <mchiasson@city.waltham.ma.us>; Bower, Brian <bbower@city.waltham.ma.us>

Cc: Alden Griffith <agriffit@wellesley.edu>

Subject: Boston Area Climate Experiment (BACE) at Waltham Field Station

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Dear Michael Chiasson and Brian Bower,

I understand the two of you are overseeing the next steps at the Waltham Field Station. We received your letter Mr. Chiasson regarding the infrastructure at the Boston Area Climate Experiment (BACE). Alden Griffith, copied, and I are the ones overseeing the ongoing experiments there. I am from Tufts and Alden Griffith is from Wellesley. We have both done a lot of work there and the current experiments are being done by Alden and by graduate and undergraduate students. In addition to using the structure for our climate-related research, we have lots of our supplies stored in the sheds.

We would very much appreciate the opportunity to discuss our work with you, and to introduce you to our facilities. Meeting in person would also help us better understand what information you are seeking. Brian, we do not use the building except to get water or use the restrooms.

Please let us know if you have any question.

Best Regards,

Colin Orians (and Alden Griffith)

Colin Orians
Professor of Biology and
Director of Environmental Studies
364 Robinson Hall
200 College Avenue
Tufts University
Medford, MA. 02155
colin.orians@tufts.edu

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From:

Sonja Wadman <swadman@walthamlandtrust.org>

Sent:

Tuesday, November 29, 2022 4:31 PM Chiasson, Michael; LaCrosse, Stew

To: Subject:

WLT Property @ 240 Beaver St.

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

Hello Mike and Stew,

I hope you both are well. I apologize for my delay in getting back to you regarding the letter sent to occupants of the Field Station seeking a list of personal property. I understand Stacey Daley of Waltham Fields Community Farm and other here at 240 Beaver Street have invited you to the property for a tour of who owns what, and I am more than happy to join in that effort.

But the Waltham Land Trust has very little to show: two small offices on the first floor which contain two printers, stewardship supplies like trash bags, gloves, and poison icy wipes, a desk, a table, several hand-me-down chairs, and lots of paperwork.

We also have a small shed tucked under the emergency staircase in the back of the building. The shed contains tools and more stewardship supplies. It's basically falling apart and might not last the winter. We have purchased another shed, the same size, to replace it but have held off on installing it given the changes in property ownership.

Kindest regards, Sonja

From:

Rob Thompson < Rob@healthy-waltham.org >

Sent:

Friday, December 2, 2022 12:00 PM

To:

Chiasson, Michael

Subject:

Waltham Fields - Healthy Waltham

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#### Michael,

I am reaching out to you as it is my understanding that the City of Waltham has asked for a listing of items at the Waltham Community farms.

Healthy Waltham has a leased refrigeration unit at the farm located next to the boiler building.

Please let me know any additional information that you need.

Best

Rob

Rob Thompson Chief Operations Officer Healthy Waltham 510 Moody St. Waltham, MA 02453 http://www.healthywaltham.org 614-638-7629 (cell)

# ENVIRONMENTAL INFORMATION REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET

LAW DEPARTMENT LETTER 11/23/22

#### Mayor

From:

Stanton, Luke

Sent:

Wednesday, November 23, 2022 1:58 PM

To:

Mayor

Subject:

Confidential: FW: Beaver Street Docs - Waltham - Senator Barrett - North Side

Confidential

Importance:

High

Mayor:

Gerry Leone sent me this earlier this week. If you click on the documents page, some of these are our CDW reports which we gave to Umass during the negotiations

I had previously provided a copy of the CDW report to Dee Kricker, who did an FOA back in April.

I do not see how we can object to any of this. I just want you to be aware that Senator Barrett was the person asking for these records.

Luke Stanton, Esq. City of Waltham Law Dept. 119 School Street Waltham, MA 02451 Istanton@city.waltham.ma.us (781) 314-3330

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders.

From: Leone, Gerard <GLeone@umassp.edu> Sent: Monday, November 21, 2022 12:13 PM

To: Stanton, Luke < Istanton@city.waltham.ma.us>; Leone, Gerard < GLeone@umassp.edu>; Lepper, Allison (UMass

Amherst) <alepper@umass.edu>

**Cc:** Dunn, Christopher (UMass Amherst) <cdunn@admin.umass.edu> **Subject:** Beaver Street Docs - Waltham - Senator Barrett - North Side

Importance: High

CAUTION: This message originated outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders

.uke:

I hope all is well.

The University has received a request from MA Senator Barrett for copies of any and all reports on the "environmental matters relating to 225-2257 Beaver Street, Waltham".

We have compiled our reports, most of which are generated by or on behalf of the University. However, some of the documentation we have consist of reports prepared by CDW on behalf of Waltham. While I believe the MA Public Records Law would require us to provide all records in our possession – including the copies of the Waltham reports we have from you – to Senator Barrett, I am writing to notify you of the request and provide you with an opportunity to let me know if you have any specific concerns or objections to the disclosure of the Waltham reports.

Copies of the documents we have from Waltham are compiled in a Dropbox folder at: Waltham Documents. If you have any questions about accessing the documents in the Dropbox, Allie will help with that.

Please let me know as soon as possible whether Waltham has any objections to the University complying with the PRL in producing the Waltham Documents to Senator Barrett. As you know, any objection would need to be consistent with the enumerated exemptions to the MA Public Records Law, and both UMass and Waltham's obligations under same.

Thanks, Gerry

#### **ENVIRONMENTAL**

01 – Supplemental Phase II Subsurface – Beaver Street 11/21/2022 10:10 am	12
02 – Supplemental Phase II FIGURE 1 – Site Location Map.pdf 11/21/2022 10:10 am	1
03 – Supplemental Phase II FIGURE 2 – 225-227 Beaver Street 11/21/2022 10:10 am	1
04 – Supplemental Phase II FIGURE 3 – 240 Beaver Street 11/21/2022 10:10 am	1
05 – Supplemental Phase II TABLE 1 – Soil Data Table.pdf 11/21/2022 10:10 am	3
06 – Supplemental Phase II TABLE 2 – Hand Boring Data Ta 11/21/2022 10:10 am	2
07 – Supplemental Phase II APPENDIX A – Soil Boring Logs 11/21/2022 10:10 am	25
08 – Supplemental Phase II APPENDIX B – Soil Laboratory 11/21/2022 10:10 am	103
09 - Supplemental Phase II APPENDIX C - Wetland Hand B 11/21/2022 10:10 am	127
10 - Supplemental Phase II APPENDIX D - Microvision Anal 11/21/2022 10:10 am	9
CDW Beaver Street – Waltham MA Haz Report 2020 11/21/2022 10:10 am	113
CDW Phase II Subsurface Beaver Street Final.pdf 11/21/2022 10:10 am	268
CDW UMass Field Station Phase I Beaver St ASTM 11/21/2022 10:10 am Pgs.1-5/Rest of	1,497 on disc
CDW DRAFT – RELEASE ABATEMENT MEASURE PLAN & TSCA PERFORMANCE BASED CLEANUP PLAN, 240 Beaver Street, Waltham, MA RTNs 3-36027 and 3-36180	120
SUMMARY OF WORK	23

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## SUPPLEMENTAL PHASE II SUBSURFACE INVESTIGATION

City of Waltham 225-227 & 240 Beaver Street Waltham, MA

Prepared for

City of Waltham 119 School Street Waltham, MA 02451

January 2020

CDW Project # 1830.1



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#### **FIGURES**

Figure 1: Site Location Map

Figure 2: 225-227 Beaver Street Site Plan with Sampling Locations

Figure 3: 240 Beaver Street Site Plan

#### **TABLES**

Table 1: Soil Data Table

Table 2: Hand Boring Data Table

#### **APPENDICES**

Appendix A: Soil Boring Logs

Appendix B: Soil Laboratory Analytical Reports
Appendix C: Wetland Hand Boring Analytical Report

Appendix D: Microvision Analytical Reports

#### 1.0 INTRODUCTION

CDW Consultants, Inc. (CDW), on behalf of our client, City of Waltham, has conducted a supplemental subsurface investigation on the properties located at 225-227 and 240 Beaver Street, Waltham, Massachusetts (Figure 1, "Site"). The investigation included the advancement of soil borings and hand-driven borings, and soil sampling and analysis. This investigation was conducted in November and December 2019. The investigation was conducted in order to further delineate areas of potential environmental impact following the prior Phase II Limited Site Investigation.

#### 1.1 Purpose

The purpose of the investigation was to evaluate subsurface conditions in an apparent dumping area on the southern side of 240 Beaver Street, and potential dumping areas located in the woods at 225-227 Beaver Street. In addition, the investigation included delineating potential impacts to the wetland area at the southeast portion of 225-227 Beaver Street from the Phoenix ("fly ash") project conducted in the 1970's. This investigation was performed in accordance with Massachusetts General Law (MGL) Chapter 21E.

#### 1.2 Site & Surrounding Area Description

CDW previously conducted an ASTM Phase I investigation of the properties listed as 240 Beaver Street and 225-227 Beaver Street, in Waltham, Massachusetts (the "Site"; Figure 1). The assessment includes one 27.9-acre parcel located at 240 Beaver Street and one 30.84-acre parcel located at 225-227 Beaver Street. Both properties comprise the University of Massachusetts Agriculture Experiment Station that was gifted to the Commonwealth in the early 1900s for educational purposes. The property is still owned by the University of Massachusetts (University).

Parcel 1 (240 Beaver Street) consists of administration buildings, greenhouses, a research area, small community garden plots, and agricultural fields. This parcel is bounded by Beaver Street to the north, a baseball field and Waverly Oaks road to the east and southeast, Marianne Road to the south, and Linden Street and the residential properties at Linen Circle and Floral Circle to the west. The southern parcel (referenced as parcel #1) is located at 240 Beaver Street and is improved with a 7,474 square foot administration building built in 1948. The three-story building has approximately 20 offices and an attached auditorium of approximately 5,000 square feet. It is currently used for office space and is known as the main building of the Waltham Experiment Station. The parcel also contains the Gray Workshop Building with four attached greenhouses, a Boiler Building that formerly generated heat for the buildings, the Corn Laboratory with two attached greenhouses, and hoop-style greenhouses. The Administration Building, Gray Workshop Building and the Boiler Building are the main structures currently in use. The parcel is bordered by the Cornelia Warren Ball Fields to the east, Waverly Oaks Road-Route 60 to the south and a residential neighborhood to the west. Access to Parcel 1 is via three gravel driveways that enter the site from Beaver Street. Two driveways provide access and parking along the east, west, and south side of the Administration Building and the other provides access along the eastern side of the Gray Workshop Building with parking on the south side of the building.

The Parcel 1 buildings are connected to municipal water, sewer and natural gas. The Administration Building was formerly heated with #2 fuel oil, supplied by two 7,500-gallon underground storage tanks (USTs). The Gray Building was heated with #2 fuel oil, supplied by one 1,000-gallon UST. All known USTs have been removed.

Parcel 2 (225-227 Beaver Street) consists of an abandoned farmhouse and dairy farm buildings including barns, storage sheds, and foundation structures for former buildings. Most of these structures are in disrepair and several have collapsed. The upland field west of the wetland was used for hay production and grazing. The eastern portion of this parcel contains approximately 16 acres of wetlands, meadow and succession forest vegetation. The wet meadow and wetland areas were not developed. The parcel is bounded to the northeast by the Fernald State School, to the south by Waverly Oaks Road and Beaver Street, to the west by Camp Cedar Hill and associated buildings owned by the Girl Scouts of Eastern Massachusetts, and to the east by Waverly Oaks Road. The wetlands contain an approximately 4,600 square feet area of fly ash material brought from an off-site source used for an agricultural research experiment conducted in the 1970's known as the Phoenix Project (a joint USEPA, Mass DEP and MA DPW project).

The Site is located on the Boston Southwest United States Geological Survey (USGS) 1987 Quadrangle Map at the following approximate location and elevation:

Souther	n Parcel 1
Universal Transverse Mercat	tor (UTM) Zone 19 Coordinates
317708.01	UTM E (Meters)
4694755.68	UTM N (Meters)
Latitude	/Longitude
42.383709°	Latitude (North)
-71.214428°	Longitude (West)
Ele	vation
58	Feet above sea level
Wester	n Parcel 2
Universal Transverse Mercat	tor (UTM) Zone 19 Coordinates
318032.00	UTM E (Meters)
4694878.00	UTM N (Meters)
Latitude	/Longitude
42.384886°	Latitude (North)
-71.210534°	Longitude (West)
Ele	vation
58-48	Feet above sea level

#### 2.0 SITE RELEASE HISTORY

#### 2.1 240 Beaver Street - Parcel 1

A portion of 240 Beaver Street was assigned Release Tracking Number (RTN) 3-28048 for a release of oil. A Class B-1 RAO was submitted to the Massachusetts Department of Environmental Protection (MassDEP) in October 2009, without remediation conducted, to achieve site closure. A portion of 240 Beaver Street was assigned RTN 3-28050 for a release condition of heavy metals in soil. A Class A-1 RAO was submitted to MassDEP on October 11, 2009 after soil remediation was completed, to achieve site closure. A portion of 240 Beaver Street was the site of an upland fly ash research area in the 1970s. No reportable conditions have been identified in the areas where fly ash was deposited.

In December 2019, the University submitted a Release Notification Form for the presence of chromium, lead and DDT in soil in a filled in area within the southeastern part of the property.

#### 2.2 225-227 Beaver Street - Parcel 2

In 1977, research was conducted at the UMASS experimental station by placing approximately 66-77 tons of municipal incinerator ash residual in two areas (A and B) on 225-227 Beaver Street immediately bordering a wetland, to simulate the effects of landfill disposal in the immediate vicinity of wetlands. According to previous reports, the researchers were unaware that some of the ash was actually placed within the wetlands resource area. Area A was ash placed at grade level over an area of approximately 25 feet x 45 feet. Area B was ash placed approximately 1.8 feet below grade to the north of Area A, within an area of approximately 15 feet x 35 feet. Since the time of ash disposal, the area has become overgrown and there is no visible surficial evidence of the ash disposal cells. Both Areas are currently surrounded by a 6 foot high chain link fence.

The ash disposal research, called the Phoenix Project, is recognized with a metal sign at the Site as a joint project of the United States Environmental Protection Agency (USEPA), the Massachusetts Department of Environmental Quality Engineering (DEQE), currently the MassDEP, and the Massachusetts Department of Public Works (DPW). The conclusion of the research was that metals were considered to have been immobilized by the highly organic soils present.

The Site was first reported to the MassDEP in October 2008, after an investigation detected lead and cadmium in soil that exceeded Reportable Concentrations. This triggered a 120-day reporting requirement and the assignment of RTN 3-28049 by the MassDEP. A Phase I Initial Site Investigation and Phase II Scope of Work report was submitted to the MassDEP in October 2009. The Site was classified Tier II. Comprehensive site investigations defined the degree and extent of heavy metals in soil and groundwater at the Site. Lead, zinc and cadmium in soil and cadmium in groundwater exceeded the Method 1 Risk Characterization Standards. A combined Phase II Comprehensive Site Assessment, Phase III Identification, Evaluation, and Selection of Comprehensive Remedial Action Alternatives, and Class C-1 Temporary Solution RAO Statement report was submitted to the MassDEP in October 2011. A 5-year review of the Temporary Solution was submitted to MassDEP in July 2016.

#### 3.0 SUMMARY OF PHASE II LIMITED SUBSURFACE INVESTIGATION

CDW has made the following observations from the Phase II Subsurface Investigation:

On May 28 and 29, 2019, CDW advanced nine (9) soil borings (GP1-1 to GP1-9) at 240 Beaver St and GP2-1 to GP2-4 at 225 to 227 Beaver Street, respectively. A two-inch diameter monitoring well was installed to a depth of 20 feet in borings GP1-3MW, GP1-5MW, and GP1-7MW at 240 Beaver Street. No wells were installed at 225-227 Beaver Street due to possible bedrock refusal in all three borings and subsequent adjacent boring locations.

Soil samples were collected continuously from samples from each boring and field-screened with a PID for TOVs. One soil sample from each of nine (9) borings was selected and submitted for laboratory analysis for EPH, VPH, VOCs, PCB's, Herbicides, Pesticides, and MCP 14 Metals. Laboratory analysis of soil samples revealed detectable concentrations EPH compounds, total metals, and pesticides. EPH compounds detected in GP1-7 (10-12') and GP1-8 (10-12') are reported below MCP RCS-2 Reportable Concentrations. Low levels of pesticides were detected in GP1-7 (3-5'). Total Metals compounds were detected in GP1-7 (10-12') and GP1-8 (10-12'). Concentrations of Chromium (730 mg/kg), Lead (220 mg/kg), and DDT (12 mg/kg). DDT was discontinued in 1972, but residues from historical use still remain.

On June 5, 2019, CDW collected groundwater samples from the newly installed monitoring wells (GP1-3MW, GP1-5MW, and GP1-7MW) and one existing monitoring well MW-2. Groundwater samples were analyzed for EPH, VPH, VOCs, PCB's, and MCP14 metals. Low levels of C9 to C18 Aliphatics and Ethylbenzene were detected in a previously installed one-inch micro well in the vicinity of the former 7,500-gallon fuel oil UST's. Low levels of dissolved metals were detected in all four monitoring wells.

Low levels of pesticides were detected in monitoring well GP1-7MW located in the southern portion of the site. No concentrations exceeded MCP RCGW-2 Standards. Low concentrations of VOC's were detected in monitoring wells GP1-7MW and MW-2. No concentrations exceeded MCP RCGW-2 concentrations.

#### 4.0 SUPPLEMENTAL SUBSURFACE INVESTIGATION

#### 4.1 Topography and Hydrogeologic Features

The Site is located between 48 and 58 feet above sea level, and the topography is generally hilly. According to the USGS geological map the bedrock at the Site consists of diorite and gabbro (Zdigb) (Zen et. al. 1983). The Salem Gabbro-Diorite is described as a Proterzoic mafic plutonic rock that retains its igneous texture with some feldspars and mafic minerals altered to chlorite and epidote. There were no bedrock outcrops observed at the Site.

There are no known drinking water source areas or private well supplies within 500 feet of the Site. The Site is not located within a Potentially Productive Aquifer and no community or known non-community drinking water supply, or MassDEP-approved or interim wellhead protection areas, exist within one mile of the Site.

Federal Emergency Management Agency Flood Insurance Rate Maps indicate that the wet meadow wetland basin is located in a Zone A2 floodplain, which is defined as an area within the 100-year flood zone where base flood elevations and flood hazard factors have been determined. The periphery of this area is designated as a Zone B floodplain, which is defined as an area between the 100 year and the 500-year flood limits. The remainder of southern parcel is located in Zone C floodplain which is outside of the 500-year flood limit.

#### 4.2 Soil Borings

On November 19 through November 21, 2019 CDW completed 27 hand borings within the wetland area of 225-227 Beaver Street, to evaluate the potential migration of previously identified SVOC's or Heavy Metals from the former "Phoenix Project" along the western edge of the wetlands. A grid pattern was established west to east away from the edge of the former fly ash experimental project. The hand borings were completed using a hand auger or post hole digger.

On December 9, 2019 CDW observed the advancement of soil borings on both properties. The soil borings were advanced by track mounted Geoprobe equipped with 5-foot long 2-inch diameter large bore sampling tubes. Soil samples were collected continuously in 5-foot acetate sleeves inserted into large bore sampler to depths up to 15 feet at 240 Beaver Street and up to 10 feet at 225-227 Beaver Street. All soil samples were classified on-site. CDW's subcontractor, Crawford Drilling of Westminster, MA completed the advancement of the soil borings. CDW's subcontractor, Contest Laboratories, Inc. of East Longmeadow, Massachusetts, completed the laboratory sample analyses.

Nine (9) soil borings (GP4-1 to GP4-9) were advanced at the southern fill area at 240 Beaver Street. GP4-1 to GP4-8 were completed to further evaluate the elevated levels of Chromium and Lead which exceeded RCS-1 concentrations in previously completed boring GP1-7. GP4-9 was completed on the access road at the southeast corner of the farm fields where recent illicit dumping of material on the roadway had taken place and observed by farm employees.

On December 9, 2019 CDW observed the advancement of six (6) soil borings (GP3-1 to GP3-6) at 225 to 227 Beaver Street. GP3-1 to GP3-3 were completed in an area approximately 50 feet northeast of the former residence to investigate mounded earth with debris. GP3-4 and GP3-5 were completed

approximately 200 feet to the east of the residence in an area that appeared to have been a former disposal area of glass and other materials. GP3-6 was completed in an approximate area where former motor vehicles and equipment from the farm reportedly had oil changes with the used oil not disposed of in a manner consistent with current state and local regulations.

The current boring locations and previous subsurface investigation locations are depicted on Figure 2 and Figure 3. Soil Boring Logs are presented in Appendix A. No groundwater monitoring wells were installed during the Supplemental Subsurface Investigation.

#### 4.3 Soil Screening and Laboratory Samples

Soil samples were collected continuously from samples from each boring and field-screened with a photoionization detector (PID) using the headspace method. The soil headspace screening results are provided on the boring logs in Appendix A. The PID is an instrument used to quantify total organic volatiles (TOVs) that ionized at or below 10.6 electron volts (a range which includes gasoline and some fuel oil organics). The detection limit for the instrument is 0.1 parts per million (ppm). One soil sample from of eight (8) of the nine (9) borings at 240 Beaver Street and three (3) of the six (6) borings at 225-227 Beaver Street was selected and submitted for laboratory analysis via Semi Volatile Organic Compounds (SVOC's), and MCP 14 metals. In addition, one soil sample was submitted for Extractable Petroleum Hydrocarbon analysis (EPH) and one sample submitted for PCB's. One soil sample from each boring at the depth that exhibited the highest field screening reading or field evidence of contamination was collected. If no field instrumentation readings were registered during drilling, the soil sample was collected from the vadose zone. The samples were preserved by ice and refrigeration, as appropriate, prior to laboratory analysis, and delivered to the laboratory accompanied by an appropriate chain of custody record.

#### 4.4 Groundwater Sampling

Groundwater samples were not collected from the previously installed monitoring wells.

#### 4.5 Groundwater Gauging

Groundwater gauging was not conducted during the supplemental Phase II investigation. Groundwater in the northern portion of 240 Beaver St appears to be flowing in a northeasterly direction toward a wetland area located in the southern portion of 225-227 Beaver Street. Groundwater in the southern portion of the site appears to be flowing in a southwesterly direction towards low wetland areas closest to Waverly Oaks Road. The groundwater flow direction was not calculated at 225-227 Beaver Street.

#### 5.0 NATURE AND EXTENT OF CONTAMINATION

The supplemental Phase II Subsurface Investigation focused on further delineating areas around the southern dumping area at 240 Beaver Street, the fly ash experimental area adjacent to the wetlands and a previously unidentified disposal area at 225-227 Beaver Street.

#### 5.1 Soil and Groundwater Classifications

The selection of a soil classification of RCS-1, as defined in the Massachusetts Contingency Plan (MCP), 310 CMR 40.0361(1)(a), for the comparison of Reportable Concentrations, is applicable to the Site because:

- The soil sample locations are located within 500 feet of a residential property.
- The property is zoned as a recreational area and is open to the public.

The selection of a groundwater classification of RCGW-2, as defined in the MCP, 310 CMR 40.0362, for the purpose of identifying Reportable Concentrations, was based upon the following criterion:

• RCGW-2 shall be applied to all groundwater cases not involving GW-1 classification.

#### 5.2 Soil/Sediment Sample Analysis Results

The results of the soil and sediment sample analysis were reviewed. The results of all soil analyses are summarized in Table 1. Copies of the laboratory analytical reports are included in Appendices B, C and D.

#### 225-227 Beaver Street - Wetland Sampling

CDW collected hand borings at 27 locations within the wetland area and collected sediment samples from 6-12" below the surface. From those borings, 20 soil samples were submitted and analyzed for SVOC's and MCP14 Metals. The hand boring locations were established in a rough grid pattern based on safe access to various locations within the wetland.

Hand boring laboratory analytical results are summarized in Table 3 and compared with MassDEP's Revised Sediment Screening Values. The sediment screening values are intended for use in Stage I Environmental Risk Characterization for sites where oil or hazardous material has been released or migrated to sediment. Stage I sediment screening values are used to evaluate the need for a quantitative Stage II Environmental Risk Characterization.

Hand borings HB-1 through HB-5 were completed directly east of the "fly ash" area. HB-5 identified Antimony (32 mg/Kg), Lead (2,700 mg/Kg), Silver (130 mg/Kg), and Zinc (5,100 mg/Kg). The remaining borings: HB-6 through HB-11, HB12 through HB-18, HB-19 through HB-23, HB-24 through HB-26, and HB-27 were completed in approximate 180 foot grids from the fly ash disposal area and the eastern property line.

Concentrations of lead and zinc closest to the original ash disposal area exceeded the sediment screening values. In addition, lead concentrations exceeded sediment screening values in hand borings HB-6, HB-7, HB-8, HB-9, HB-10, HB-14, HB-19 and HB-24. HB-6 is located hydrologically upgradient of the ash disposal area but is the closest sample location to the glass and ash disposal area. Lead concentrations that exceeded sediment screening values in HB-19 and HB-24 are located on the other side of the stream

bed along the eastern property line and may be attributed to a former railroad siding and tracks that are still visible along the property boundary. Trace levels of semi-volatile organic compounds were also identified hand borings HB-6, HB-7, HB-9, HB-10, HB-14, HB-19, and HB-24.

A sediment sample collected from HB-5 (0-1') was submitted to Microvision Laboratories for Microscopic Analysis for Coal, Coal Ash, and Wood Ash. Results indicated the presence of coal, coal ash, and wood ash.

#### 240 Beaver Street - Geoprobe Drilling

Soil samples from the southern fill area were submitted and analyzed for Semi-Volatile Organic Compounds (SVOC') and MCP14 metals. On soil sample from boring GP4-2 was submitted for PCB's based on visual observations of a caulking-like material from 3-5 feet below grade during the subsurface investigation.

Laboratory analysis of soil samples did not identify detectable concentrations of SVOC's above laboratory minimum detection limits. Concentrations of arsenic, barium, beryllium, cadmium, chromium, lead, nickel, vanadium, and zinc were identified in borings supplemental borings GP4-1 through GP4-7, and GP4-9. The concentrations of metals did not exceed RCS-1 concentrations. The caulk-like material from soil boring GP4-2 (6-8') reported PCB's (66 mg/Kg) above RCS-1 concentrations.

A soil sample collected from GP4-1 (3-5 feet) was submitted to Microvision Laboratories for Microscopic Analysis for Coal, Coal Ash, and Wood Ash. Results did not indicate the presence of coal, coal ash, or wood ash.

#### 225-227 Beaver Street- Geoprobe Drilling

An apparent dumping area of glass and ash was observed during the wetland sampling event in November 2019. The glass and ash area appeared approximately 1 to 2 feet thick. The disposal area appeared approximately 50 to the west of the wetland edge. Laboratory analysis of soil samples collected from this disposal area identified elevated concentrations of lead. Concentrations of lead were reported in GP3-4 (3-5') at 1,000 mg/Kg and GP3-5 (3-5') at 1,100 mg/Kg within this disposal area. Both soil samples exceeded RCS-1 concentrations for lead. An additional soil sample was submitted to Microvision for analysis for coal or coal ash. The results confirmed the presence of coal or coal ash within the sample.

Laboratory analysis of soil samples collected from a reported former oil changing area identified EPH fractions below RCS-1 standards.

#### 6.0 CONCLUSIONS

The Supplemental Phase II Site Investigation was implemented to further delineate areas of potential environmental impact previously identified in the Phase II Limited Site Investigation. The Supplemental Site Investigation further evaluated a portion of the property at 225-227 Beaver Street and the southern part of 240 Beaver Street. Based upon the results of the supplemental soil and sediment testing and site observations, CDW is presenting our conclusions and a summary of the key observations upon which these conclusions are based. From this study, CDW has made the following conclusions:

#### 240 Beaver Street

Soil borings were completed in the southern fill area to further delineate the soil conditions in the vicinity of GP1-7 and assess the observed area of past dumping practices.

Soil borings in this area identified fill material containing varying amounts of black fine sand with minor amounts of brick, concrete, gravel and tan to gray sand. This material could represent historic fill if consistent with nearby soil observations; however, after a review of aerial maps, soil borings, personnel interviews, and other sources, this material appears to be unique, and emplaced over a long period of time, which expanded an otherwise steep embankment. A soil sample from this area was submitted to Microvision to identify the potential presence of coal, coal ash or wood ash. The results were negative for those components. Therefore, the presence of heavy metals was not exempt from reporting and will require additional filings under the Massachusetts Contingency Plan.

The presence of PCBs at concentrations that exceeded 50ppm is an illegal use and disposal of this material. The source and extent of the material is unknown. The U.S. EPA regulations would require removal or capping of these materials to eliminate the risk of human exposure to PCBs.

#### 225-227 Beaver Street

Hand borings HB-1 through HB-27 were completed within the wetland to the east of the "fly ash" disposal area. The highest concentrations of heavy metals were in HB-5, the southernmost sample location directly adjacent to the original ash disposal area. Metals detected included Antimony, Lead, Silver, and Zinc. Concentrations of lead in multiple locations exceeded the MassDEP sediment screening values, including a wetland location close to an upland glass and ash dumping area. The lead concentration in sediment sample HB-14 exceeded the screening value and is notable for its location beyond the previously known extent of lead within the wetland. Lead concentrations in two sediment sample locations along former railroad tracks at the northeast property boundary also exceeded the screening value.

A Stage II Environmental Risk Characterization would be required to verify whether the current concentrations of heavy metals in the wetland resource area represent a significant risk to the environment if left in place. In addition, a Method 3 risk characterization should be used to evaluate the ash disposal areas, and additional feasible options considered for achieving a Permanent Solution that would allow for future uses. Groundwater was not tested during this investigation; however, prior investigations identified the presence of cadmium in groundwater that exceeded the standards at that time.

The Site is regulated under the MCP and has achieved a Class C Temporary Solution. In accordance with the MCP, 310 CMR 40.1050(4)(b), a Periodic Review of the Temporary Solution shall be conducted

every fifth year after the date of filing the Temporary Solution Statement, until such time that a Permanent Solution Statement is submitted. Such Periodic Review Opinion shall include primarily: an evaluation of the feasibility of implementing one or more permanent solutions for the disposal site, effectiveness of the Temporary Solution(s), and definitive and/or enterprising steps taken to identify, develop and implement a feasible Permanent Solution at the Site. If a Permanent Solution has not been achieved, the next 5-year Periodic Review Opinion is due October 2021.

Soil borings were completed to the northeast of the former residential house to assess the possible manmade mounding used for disposal purposes. Geoprobe drilling of the elevated mound identified the presence of bedrock covered in a loamy soil. Samples for laboratory analysis were not collected and no unusual environmental conditions were noted.

An apparent dumping area of glass and ash was observed during the wetland sampling event in November 2019. The glass and ash area appeared approximately 1 to 2 feet thick. The disposal area appeared approximately 50 to the west of the wetland edge. Two soil samples were submitted from this disposal area. Both soil samples exceeded RCS-1 concentrations for lead. An additional soil sample was submitted to Microvision for analysis for coal or coal ash. The results confirmed the presence of coal or coal ash within the sample. In accordance with the 2016 Historic Fill / Anthropogenic Background Public Comment DRAFT Technical Update, the material cannot be considered anthropogenic background as Historic Fill, as it primarily consists of coal or coal ash that was emplaced in this location. Therefore, the concentrations of lead within the glass and ash dumping area are reportable by the Site owner to the MassDEP within 120 days of their knowledge.

One boring was completed south of the former calf barn where it was reported that motor oil and oil from small engines would be disposed of by allowing the oil to spill onto the ground. One soil boring was completed in December 2019 and identified low levels of C19-C36 aliphatics (120 mg/Kg) and C11 to C22 aromatics (52 mG/Kg). EPH concentration did not exceed RCS-1 Standards and no further action is required at this time.

#### 7.0 LIMITATIONS

This investigation was intended to provide a general assessment of current subsurface conditions and was limited in nature and scope. The findings are limited to the information available at the time of the investigation and the scope of services as defined. The results of the limited subsurface exploration performed on this Site provide the basis for the findings and are representative of conditions at the time of the investigation. No other conclusions, interpretations, or recommendations are contained or implied in this report other than those expressed. Also, CDW makes no warranty, expressed or implied, on the accuracy of the work and information completed by others and upon which CDW has relied to prepare this report. No other use of this report is warranted without the written consent of CDW Consultants, Inc.

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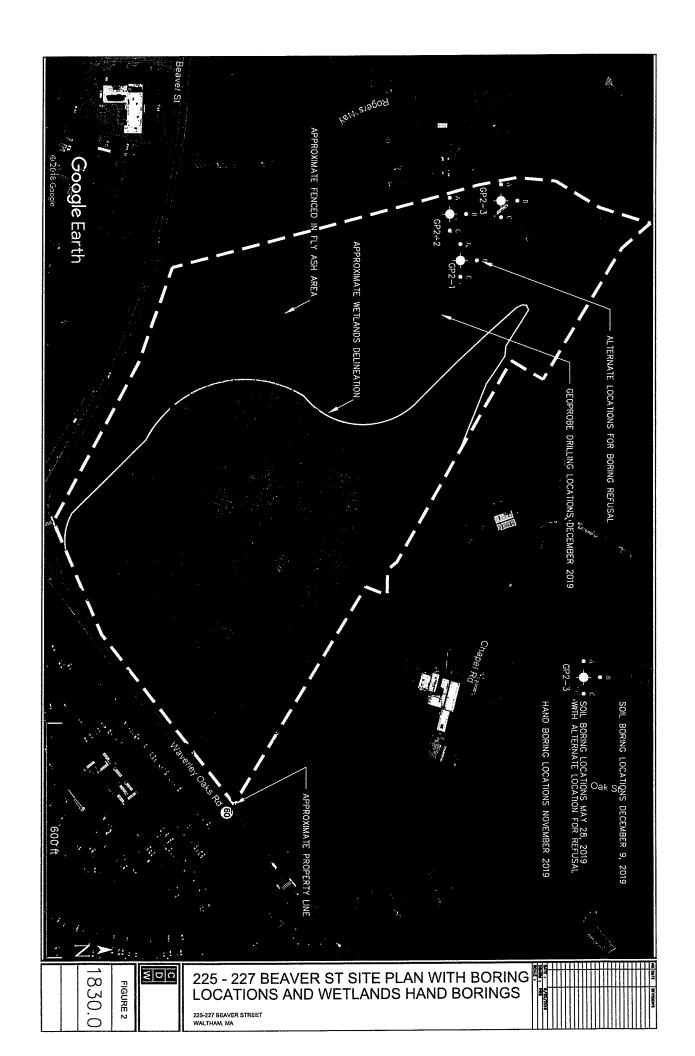


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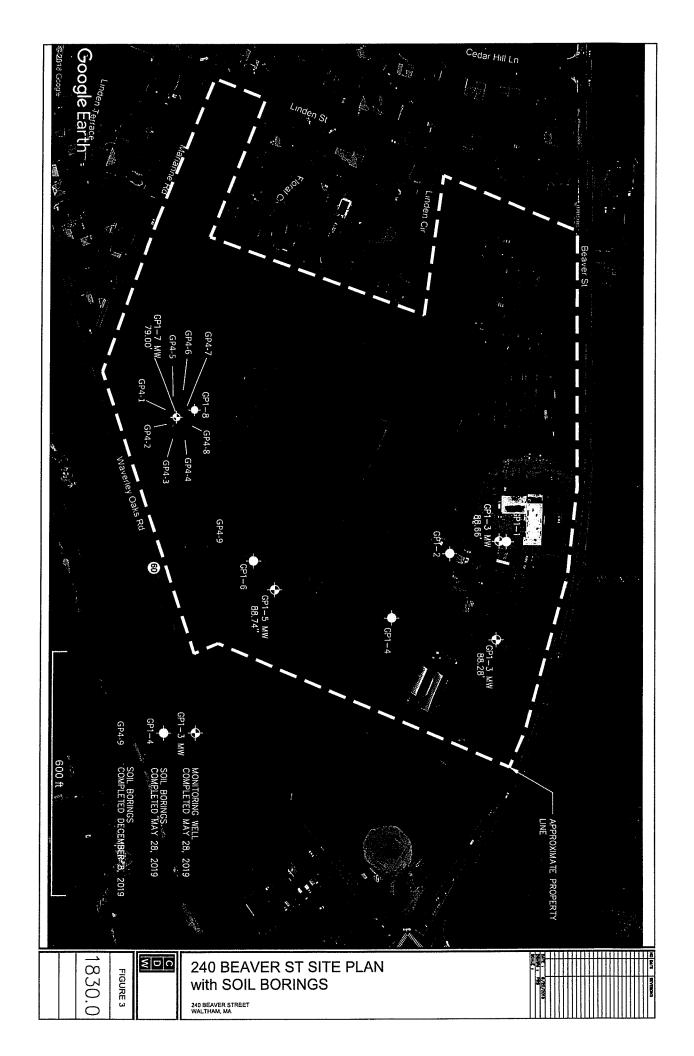
225-227 & 240 BEAVER STREET WALTHAM, MA Figure 1 - Site Location Map



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DIMETHYLPHTHALATE	2,4-DIMETHYLPHENOL	DIETHYLPHTHALATE	2,4-DICHLOROPHENOL	3.3'-DICHLOROBENZIDINE	1.3-DICHLOROBENZENE	1,2-DICHLOROBENZENE	DI-N-BUTYLPHTHALATE	DIBENZOFURAN	DIBENZ(A,H)ANTHRACENE	CHRYSENE	4-CHEOROPHENYLPHENYL EIHER	CHI OBOBLESNI BLESNY CTUE	2-CHICHONAPHIHALENE	4-CHLORO-3-METHYLPHENOL	4-CHEOKOWINIE	CARBAZOLE	BUITLBENZTLPHIRAUAIE	4-BROMOPHENYL PHENYL ETHER	BIS(2-ETHYLHEXYL)PHTHALATE	BIS(Z-CHLOROISOPROPYL)ETHER	BIS(2-CHLOROETHYL)ETHER	BIS(2-CHLOROETHOXY)METHANE	BENZOIC ACID	BENZO(K)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(B)FLUORANTHENE	BENZO(A)PYRENE	BENZO(A)ANTHRACENE	BENZIDINE	ANTHRACENE	ANILINE	ACETOPHENONE	ACENAPHTHENE	8270D-E (mg/Kg dry)	SVOC	MERCURY	SW-846 74718 (mg/Kg dry) Metals Digestion	ZINC	THALLIUM	SILVER	SELENIUM	NICKEL	CHROMIUM	CADMIUM	BERYLLIUM	BARIUM	ARSENIC	SW-846 6010D (mg/Kg dry) Metals Digestion	MCP 14 Metals	SM 2540G (% Wt)	TIMESAMPLED	DATE SAMPLED	SAMPLEID	PARAMETER
																																		-	SW-846	20	Metals Diaestion	460				49	110	5.0		;	#	Aetals Digestion	ıls		Values	Sediment Screening	MassDEP's Revised	Regulatory Limits
ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.26)	ND (0.26)	ND (0.51)	(TS:0) ON	ND (0.51)	ND (1.0)	ND (1.0)	ND (0.26)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (1.5)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (1.0)	ND (0.26)	ND (0.51)	ND (0.24)	ND (0.26)			0.15		4 4	ND (2.5)	_	ND (5.0)	ن ب	# E	ND (0.25)	0.57	47	42.7 UN	1	00.5	5				
ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.21)	ND (0.21)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.82)	ND (0.82)	ND (0.21)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (1.2)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.82)	ND (0.21)	ND (0.42)	ND (0.21)	(17.0) ON			9.0		5,100	ND (2.1)	130	ND (4.1)	170	73	29	0.28	450	32	;	92.5	5				
ND (0.60)	ND (0 60)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	(0E.0) GN	ND (0.30)	ND (0.60)	ND (0.60)	ND (0.60)	ND (1.2)	NO (1.2)	ND (0.30)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (1.8)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (1.2)	ND (0.30)	ND (0.60)	ND (0.50)	ND (0.30)			0.21		2 2	ND (2.9)	ND (0.58)	ND (5.8)	22	14	ND (0.29)	0.43	<b>₹</b>	S 2 ON		,,,	6		(11/20/2019		
ND (0.64)	NO fo GAT	NO (0.54)	ND (0.54)	ND (0.54)	ND (0.64)	ND (0.64)	ND (0.64)	ND (0.64)	ND (0.32)	ND (0.32)	ND (0.64)	NO (0.64)	ND (0.64)	ND (1.2)	ND (1.2)	ND (0.32)	ND (0.64)	ND (0.64)	ND (0.64)	ND (0.64)	ND (0.64)	ND (0.64)	ND (1.9)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (1.2)	ND (0.32)	ND (0.64)	ND (0.32)	ND (0.32)			6		£ 43	ND (3.1)	ND (0.62)	ND (6.2)	22	15	ND (0.31)	0,47	47	NO (3.1)		33.2	S				
ND (0.73)	ND (0 73) *	ND (0.72)	ND (0.73) *	ND (0./3)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.36)	ND (0.36)	ND (0.73)	ND (0.73)	ND (0.73)	ND (1.4)	ND (1.4)	ND (0.36)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (2.1)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (1.4)	ND (0.36)	ND (0.73)	(EC.0) ON	ND (0.36)			0.22	ļ	7 49 78	ND (3.6)	ND (0.72)	ND (7.2)	13 704-70	16	ND (0.36)	0.54	51 1	ND (3,6)		40.7	AE 7	9:30	11/20/2019	HB-8	
ND (0.79)	105.07 UN	ND (0.79)	ND (0.33)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.39)	0.41	ND (0.79)	ND (0.79)	ND (0.79)	ND (1.5)	ND (1.5)	ND (0.39)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (2.3)	ND (0.39)	ND (0.39)	0.43	ND (0.39)	ND (0.39)	ND (1.5)	ND (0.39)	ND (0.79)	ND (0.33)	ND (0.39)			0.22		140	ND (3.8)	ND (0.76)	ND (7.6)	18	16	ND (0.38)	0.41	ν.	ND (3.8)	į	46.	3	10-00	100	HB-9	
ND (0.75)	ND (0.75)	20 (0.75)	ND (0.50)	ND (0.75)	ND (0.75)	ND (0.75)	ND (0.75)	ND (0.75)	ND (0.38)	ND (0.38)	ND (0.75)	ND (0.75)	ND (0.75)	ND (1.5)	ND (1.5)	ND (0.38)	ND (0.75)	ND (0.75)	ND (0.75)	ND (0.75)	ND (0.75)	ND (0.75)	ND (2.2)	ND (0.38)	ND (0.38)	0.39	ND (0.38)	ND (0.38)	ND (1.5)	ND (0.38)	ND (0.75)	ND (0.30)	ND (0.38)			0.29		115	ND (3.8)	ND (0.77)	ND (7.7)	19	16	0.41	15.0	ខ	NO (3.8)		44.7	3				
ND (0.56)	ND (0:50)	NO (0.50)	ND (0.26)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.28)	ND (0.28)	ND (0.56)	ND (0.56)	ND (0.56)	ND (1.1)	ND (1.1)	ND (0.28)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (1.6)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (1.1)	ND (0.28)	ND (0.56)	ND (0.24)	ND (0.28)			911		ş 38	ND (2.7)	ND (0.55)	ND (5.5)	5 6		ND (0.27)	0.53	S ;	ND (2.7)		e c	Š	11:00	11/20/2019	HB-11	
ND (0.73)	ND (0.73)	NO (0.73)	(CE) ON	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.37)	ND (0.37)	ND (0.73)	ND (0.73)	ND (0.73)	ND (1.4)	ND (1.4)	ND (0.37)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (2.2)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (1.4)	ND (0.37)	ND (0.73)	ND (0.57)	ND (0.37)			0.23	Ī	7 54	ND (3.7)	ND (0.73)	ND (7.3)	E.	15	ND (0.37)	0.56	<u>v</u>	ND (3.7)	i :	Į.	3	12:00	5102/02/11	HB-14	SA
ND (0.44)	10 (0.14)	200.4	20.22	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.22)	ND (0.22)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.86)	ND (0.86)	ND (0.22)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (1.3)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.86)	ND (0.22)	ND (0.44)	NO (0.22)	ND (0.22)			0.091		26	ND (2.2)	ND (0.44)	ND (4.4)	7 8	: ::	ND (0.22)	0.38	<b>6</b>	8 E	i i	i	ž				SAMPLING LOCATION
ND (0.61)	No for of t	(19.0) CIN	ND (0.30)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.30)	ND (0.30)	ND (0.61)	ND (0.61)	ND (0.61)	ND (1.2)	ND (1.2)	ND (0.30)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (1.8)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (1 2)	ND (0.30)	ND (0.61)	ND (0.50)	ND (0.30)			011		7E	ND (3.0)	ND (0.60)	ND (6.0)	2 0	: :	ND (0.30)	0.49	T ;	ND (3.0)	; ;	,,,,	Ç.	14:00	21/20/2019	HB-16	Ι-
ND (0.59)	NO (0.33)	NO (0.59)	NO (0.30)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.30)	ND (0.30)	ND (0.59)	ND (0.59)	ND (0.59)	ND (1.1)	ND (1.1)	ND (0.30)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (1.7)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (1.1)	(0E.0) CIN	ND (0.59)	20 (0.50)	ND (0.30)			0.12	ľ	S 37	ND (2.9)	ND (0.58)	ND (5.8)	2 5	: ::	0.29	0.45	S	ND (2.9)		0.00	n n	15:00	11/20/2019	HB-17	
ND (0.50)	(0.50)	NO (0.50)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.25)	0.66	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.98)	ND (0.98)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.5)	0.31	0.43	0.81	0.6	0.51	ND (0.0)	ND (0.56)	ND (0.50)	ND (0.25)	ND (0.25)			0.11	1	35	ND (2.5)	ND (0.49)	ND (4.9)	16	26	0.57	0.31	8 8	ND (2.5)		9	0	8:30	11/21/2019	<b>经 HB-19</b> 法	
ND (0.72)	ND (0.72)	ND (0.72)	ND (0.36)	ND (0.72)	ND (0.72)	ND (0.72)	ND (0.72)	ND (0.72)	ND (0.36)	ND (0.36)	ND (0.72)	ND (0.72)	ND (0.72)	ND (1,4)	ND (1.4)	ND (0.36)	ND (0.72)	ND (0.72)	ND (0.72)	ND (0.72)	ND (0.72)	ND (0.72)	ND (2.1)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (1 4)	(3E 0) CN	ND (0.74)	(ac.o) ON	ND (0.36)			0.1	ļ	2 %	ND (3.5)	ND (0.70)	ND (7.0)	= 2	: 12	0.42	0.66	110	ND (3.5)		á	À .	9:00	/2019 9:00	HB-20	
ND (0.63)	(c.63)	ND (0.63)	ND (0.32)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.32)	ND (0.32)	ND (0.63)	ND (0.63)	ND (0.63)	ND (1.2)	ND (1.2)	ND (0.32)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (1.9)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (1 2)	ND (0.02)	(E9.0) GN	ND (0.32)	ND (0.32)			011	ļ	2 2	ND (3.2)	ND (0.63)	ND (6.3)	5 t	; ∺	0.41	0.81	70	ND (3.2)		Į,	537	10:30	11/21/2019	H8-22	
ND (0.63)	ND (0.63)	NO (0.63)	ND (0.32)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.32)	ND (0.32)	ND (0.63)	ND (0.63)	ND (0.63)	ND (1.2)	ND (1.2)	ND (0.32)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (1.9)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (1 2)	ND (0.03)	ND (0.63)	ND (0.32)	ND (0.32)			0.11		£ &	(0.E) DN	ND (0.61)	ND (6.1)		: ដ	0.45	0.81	70	ND (3.0)		10.0	g n	11:30	11/21/2019	HB-23	
ND (0.47)	NO (0.4/)	ND (0.47)	ND (0.23)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.23)	0.63	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.91)	ND (0.91)	ND (0.23)	ND (0.47)	ND (0.47)	3.5	ND (0.47)	ND (0.47)	ND (0.47)	ND (1.4)	0.29	0.32	0.75	0.53	15.0	ND (0 411	(EC 0) GN	ND (0.47)	ND (0.23)	ND (0.23)			0.095	ľ	<b>1</b> 25	ND (2.4)	ND (0.48)	ND (4.8)	71	27	0.45	0.31	e l	ND (2.4)		10.5	30 8	12:30	11/21/2019	H8-24	
ND (0.59)	ND (0.59)	ND (0.59)	ND (0.30)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.30)	ND (0.30)	ND (0.59)	ND (0.59)	NO (0.59)	ND (1.1)	ND (1.1)	ND (0.30)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (1.7)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (1 1)	N (0.0)	ND (0.59)	20 (0.30)	ND (0.30)			0.21	ŀ	8 8	ND (3.0)	ND (0.59)	ND (5.9)	= 0	; ;	0.32	0.67	er :	ND (3.0)			5	13:00	11/21/2019	HB-25	
ND (0.55)	ND (0.55)	ND (0.55)	ND (0.27)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.27)	ND (0.27)	ND (0.55)	ND (0.55)	ND (0.55)	ND (1.1)	ND (1.1)	ND (0.27)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (1.6)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.55)	ND (0.55)	ND (0.27)	ND (0.27)			0.11	ļ	7 37	NO (2.7)	ND (0.54)	ND (5.4)	# #	: ::	0.39	0.76	ඩ :	ND (2.7)	j }	9.5	5	13:30	11/21/2019	HB-26	
NO (0.56)	ND (0.56)	ND (0.56)	ND (0.28)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.28)	ND (0.28)	ND (0.56)	ND (0.56)	ND (0.56)	ND (1.1)	ND (1.1)	ND (0.28)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (1.6)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (1.1)	ND (0.50)	ND (0.56)	ND (U.Za)	ND (0.28)			0.12	,	8 38	ND (2.7)	ND (0.55)	ND (5.5)	9 4	: 13	0.4	0.83	66 ;	ND (2.7)		25.5	0	14:30	11/21/2019	€ HB-27	

Table 2 Hand Borings 225-227 Beaver Street

4.6-DINITRO-2-METHYLPHENOL	ND (0.51)   N	ND (0.42)   ND	ND (0.60) ND (0.64)	0.64) ND (0.73	73) ND (0.79)	ND (0.75)	Ipueggo) da	ND (oldendleogleses.73)	ND (0.44)	ND (0.61) N	ND (0.59) N	ND (0.50)   NO	ND (0.72) NO	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	ND (0.55)	ND (0.56
2,4-DINITROPHENOL						ND (1.5)	135-227 B	135-727 Beaven Stuget								ND (0.91)	ND (1.1)	8	ND (1.1)
2,4-DINITROTOLUENE		_	_	_	_	_	ND (0.56)	ND (0.73)	ND (0.44)		ND (0.59) N		ND (0.72) NI	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	ND (0.55)	0.55)
2,6-DINITROTOLUENE	ND (0.51) N	ND (0.42) ND	ND (0.60) ND (0.64)	_	73) ND (0.79)	ND (0.75)	ND (0.56)	ND (0.73)	ND (0.44)	ND (0.61) N	ND (0.59) N	ND (0.50) ON	ND (0.72) NC	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	Š	VD (0.55)
DI-N-OCTYLPHTHALATE	_	_	_	_	_	_	ND (0.56)	ND (0.73)	ND (0.44)	ND (0.61) N	ND (0.59) UN	ND (0.50) NI	ND (0.72) NC	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	Z	ND (0.55)
2-DIPHENYLHYDRAZINE (AZOBENZENE)	_	_	_	_	_	_	ND (0.56)	ND (0.73)	ND (0.44)	=	ND (0.59) N	_	ND (0.72) NC	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	Z	ND (0.55)
FLUORANTHENE	_	_	_				ND (0.28)	0.39	ND (0.22)	2	ND (0.30)	1.1 N	ND (0.36) NI	ND (0.32) N	ND (0.32)	0.97	ND (0.30)	Š	ND (0.27)
FLUORENE	_	_	_	ND (0.32) ND (0.36)	36) ND (0.39)	ND (0.38)	ND (0.28)	ND (0.37)	ND (0.22)	ND (0.30) N	ND (0.30) N	ND (0.25) NI	ND (0.36) NI	ND (0.32) N	ND (0.32)	ND (0.23)	ND (0.30)	ž	ND (0.27)
HEXACHLOROBENZENE	_	_	_	_	_	_	ND (0.56)	ND (0.73)	ND (0.44)	ND (0.61) N	ND (0.59) N	ND (0.50) ND	ND (0.72) * NI	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	N	ND (0.55)
HEXACHLOROBUTADIENE	_	_	_	_	_		ND (0.56)	ND (0.73)	ND (0.44)	ND (0.61) N	ND (0.59) N	ND (0.50) NI	ND (0.72) NE	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	Ñ	ND (0.55)
HEXACHLOROCYCLOPENTADIENE	_	_	_	_	_	_	ND (0.56)	ND (0.73)	ND (0.44)	ND (0.61) N	ND (0.59) N	ND (0.50) NI	ND (0.7Z) NI	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	Š	ND (0.55)
HEXACHLOROETHANE	_	_	_	_	_	_	ND (0.56)	ND (0.73)	ND (0.44)	ND (0.61)	ND (0.59) N	ND (0.50) ND	ND (0.72) • NI	ND (E8.0) ON	ND (0.63)	ND (0.47)	ND (0.59)	Š	ND (0.55)
INDENO(1,2,3-CD)PYRENE	_		_	_	_	ND (0.38)	ND (0.28)	ND (0.37)	ND (0.22)	ND (0.30) N	ND (0.30)	2.5	ND (0.36) N	ND (0.32) N	ND (0.32)	0.38	No (0.30)	S	NO (0.27)
ISOPHORONE	_	_	_	_	73) ND (0.79)	ND (0.75)	ND (0.56)	ND (0.73)	ND (0.44)		ND (0.59) N	ND (0.50) NI	ND (0.72) NI	ND (0.63) N	ND (0.63)	ND (0.47)	ND (0.59)	ND (0.55)	0.55)
1-METHYLNAPHTHALENE	_	_	_	_	_	_	ND (0.28)	ND (0.37)	ND (0.22)	ND (0.30) N	ND (0.30) N	ND (0.25) N	ND (0.36) NI	ND (0.32) N	ND (0.32)	ND (0.23)	ND (0.30)	ND (0.27)	.27)
2-METHYLNAPHTHALENE	ND (0.26)	ND (0.21) ND	ND (0.30) ND (	ND (0.32) ND (0.36)	36) ND (0.39)	ND (0.38)	ND (0.28)	ND (0.37)	ND (0.22)		ND (0.30) N	ND (0.25) NI	ND (0.36) NI	ND (0.32) N	ND (0.32)	ND (0.23)	ND (0.30)	ND (0.27)	27)
O-CRESOL	ND (0.51)	_	_		73) ND (0.79)	) ND (0.75)	ND (0.56)	ND (0.73)	ND (0.44)	ND (0.61) N	ND (0.59) N	ND (0.50) N	ND (0.72) NI	ND (0.63) N	VD (0.63)	ND (0.47)	ND (0.59)	ND (0.55)	55)
M/P-CRESOL	ND (0.51)	_	ND (0.60) ND (		_	ND (0.75)	ND (0.56)	ND (0.73)		-	ND (0.59)	ND (0.50)	-	_	ND (0.63)	ND (0.47)	ND (0.59)	5	
NAPHTHALENE	ND (0.26)	ND (0.21) NO		ND (0.64) ND (0.73	10101011	_			ND (0.44)	(Torol day	-	_	(27.0)	NU (U.63)	_			100	.55)
2-NITROANILINE	ND (0.51) N	ND (0.42) ND	_				ND (0.28)	ND (0.37)	ND (0.44) ND (0.22)							ND (0.23)	ND (0.30)	ND (0	.SS)
3-NITROANILINE	_	ND (0.42) ND					ND (0.28) ND (0.56)	ND (0.37) ND (0.73)	ND (0.44) ND (0.22) ND (0.44)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59)	ND (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0	55) 55)
4-NITROANILINE	ND (0.51)	ND (0.42) ND					ND (0.28) ND (0.56) ND (0.56)	ND (0.37) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44)							ND (0.23) ND (0.47) ND (0.47)	ND (0.30) ND (0.59) ND (0.59)	ND (0.	SS)
NITROBENZENE	_	ND (0.42) ND					ND (0.28) ND (0.56) ND (0.56) ND (0.56)	ND (0.37) ND (0.73) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44)							ND (0.23) ND (0.47) ND (0.47) ND (0.47)	ND (0.30) ND (0.59) ND (0.59)	N N N N N N N N N N N N N N N N N N N	SS) SS) SS)
2-NITROPHENOL	ND (0.51)	ND (0.42) NC					ND (0.28) ND (0.56) ND (0.56) ND (0.56) ND (0.56)	ND (0.37) ND (0.73) ND (0.73) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44)							ND (0.23) ND (0.47) ND (0.47) ND (0.47) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59)	N N N N N N N N N N N N N N N N N N N	55) 55) 55) 55)
4-NITROPHENOL	ND (1.0)	ND (0.82) NI					ND (0.28) ND (0.56) ND (0.56) ND (0.56) ND (0.56)	ND (0.37) ND (0.73) ND (0.73) ND (0.73) NO (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44)							ND (0.23) ND (0.47) ND (0.47) ND (0.47) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	NO 00 00 00 00 00 00 00 00 00 00 00 00 00	SS) SS) SS) SS) SS)
N-NITROSODIMETHYLAMINE	ND (0.51)						ND (0.28) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56)	ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44)							ND (0.23) ND (0.47) ND (0.47) ND (0.47) ND (0.47) ND (0.47) ND (0.47)	ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	12 GN 60 GN 60 GN 60 GN	(35)
N-NITROSODIPHENYLAMINE	ND (0.51)	_					ND (0.28) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (1.1) ND (0.56)	ND (0.37) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.86) ND (0.44)							ND (0.23) ND (0.47) ND (0.47) ND (0.47) ND (0.47) ND (0.47) ND (0.47) ND (0.91)	ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	10 00 00 00 00 00 00 00 00 00 00 00 00 0	25) 25 55 55 55 55 55 55 55 55 55 55 55 55
N-NITROSO-DI-N-PROPYLAMINE	-						ND (0.28) ND (0.56)	ND (0.37) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.46) ND (0.44) ND (0.44)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55) 55) 55) 55) 55) 55) 55)
PENTACHLORONITROBENZENE	_						ND (0.28) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56)	ND (0.37) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	0) GN (0) GN (1) GN (0) GN (0) GN (0) GN (0) GN (0) GN	(55) (55) (55) (55) (55)
PENTACHLOROPHENOL							ND (0.28) ND (0.56)	ND (0.37) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.44)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	NO (0. NO	(55 (55 (55 (55 (55 (55 (55 (55 (55 (55
							ND (0.28) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56)	ND (0.37) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (1.4) ND (1.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	NO 60 00 00 00 00 00 00 00 00 00 00 00 00	55) 55) 55) 55) 55) 55) 55) 55) 55) 55)
PHENANTHRENE							ND (0.28) ND (0.56)	ND (0.37) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.46) ND (0.46) ND (0.46) ND (0.46) ND (0.46) ND (0.46) ND (0.47) ND (0.48) ND (0.48) ND (0.48) ND (0.48) ND (0.48) ND (0.48)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	N N N N N N N N N N N N N N N N N N N	55) 55) 55) 55) 55) 55) 55) 55) 55) 55)
PHENANTHRENE PHENOL							ND (0.28) ND (0.56)	ND (0.37) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44) ND (0.44) ND (0.44) ND (0.44) ND (0.46) ND (0.44)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	NO (0,0  NO (0,0 NO (0,0) NO (0,0 NO (0,0) N	55) 55) 55) 55) 55) 55) 55) 55) 55) 55)
PHENANTHRENE PHENOL PYRENE							ND (0.28) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (0.56) ND (1.1) ND (0.56) ND (1.2) ND (0.56)	ND (0.37) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44)							ND (0.23) ND (0.47) ND (0.47)	ND (0.30) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59) ND (0.59)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55) 55) 55) 55) 55) 55) 55) 55) 55) 55)
PHENANTHRENE PHENOL PYRENE PYRIDINE							ND (0.58) ND (0.56)	ND (0.37) ND (0.73) ND (0.73)	ND (0.44) ND (0.22) ND (0.44)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59) ND (0.59)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55) 55) 55) 55) 55) 55) 55) 55) 55) 55)
PHENANTHRENE PHENOL PYRENE PYRENE PYRONNE 1,2,4,5-TETRACHIOROBENZENE							ND (0.58) ND (0.56)	ND (0.37) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (1.4) ND (1.4) ND (0.73)	ND (0.44) ND (0.22) ND (0.44)							ND (0.23) ND (0.47)	ND (0.30) ND (0.59) ND (0.59)	ND (0.25) ND (0.55)	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
PHENANTHRENE PHENOL PYRENE PYRENE PYRIDNE 1.2.4.5-TETRACHIOROBENZENE 1.2.4-TRICHIOROBENZENE							ND (0.28) ND (0.56) ND (0.58)	ND (0.37) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (0.73) ND (1.4) ND (0.73)	ND (0.44) ND (0.22) ND (0.44)							ND (0.23) ND (0.47) ND (0.47) ND (0.47) ND (0.47) ND (0.547) ND (0.547) ND (0.47)	ND (0.30) ND (0.59)	ND (0.25) ND (0.55)	55) 55) 55) 55) 55) 55) 55) 55) 55) 55)
PHENANTHRENE PHENOL PYRENE PYRIDINE 1.2.4.5-TETRACHIOROBENZENE 1.2.4.5-TRICHIOROBENZENE 2.4.5-TRICHIOROPHENOL							ND (0.58) ND (0.56)	ND (0.37) ND (0.73)	ND (0.44) ND (0.42) ND (0.44)							ND (0.23) ND (0.47)	MD (0.29) MD (0.59)	ND (0.27) ND (0.55)	55) 55) 55) 55) 55) 55) 55) 55) 55) 55)

1. ND = Not detected above the lab reporting limits shown in parenthesis.
2. ~ = No Method 1 Standard or UCL available
3. Grey shaded values exceed the MCP Reportable Concentrations 1 (RCS-1).

### CDW Consultants, Inc.

Project No.:	1830	Client:	City of Waltham	BORING ID:	GP4-9
Total Depth:	2 ft	Location:	240 Beaver St	Logged By:	AMS
Date Started:	12/9/2019	Completed:	12/9/2019	Contractor:	Crawford
Casing ID:		Ground El.		Sheet #:	1
Remarks:	6610 DT Geoprobe				

Casin Rema		6610 DT (	Geoprobe	!		nd El.	-	Sneet #:		
£		Samp	ole			1				Ē
Depth (Feet)	C Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)		Sample De	•	:	Molf Diagram
0	S1		0'	24"	0		gray graded			
-1					0.0	tan to c	gravel, silt, t	nne sand D, trace gravel with		
•			2'		2		broken ro	ock; dry		
-2							End of Borin	g at 2 feet		
-3										
-0										
-4										
-5					-					
-5									-	
-6										
-7										
-/										
-8										
-9		<u> </u>			-					
-9										
-10										
44	***	<u> </u>		-						
-11										
-12										
42	-									
-13					<b></b>					
-14									5	
-15										
-16										
-17			<del>                                     </del>							
-18										
-19										
-20										
								<u> </u>		
	oto.		water Me				Summary	Fill	4 - 5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
ט	ate	Time	Depth to	Ground	uwater	Measuring Point	Rock:	NA NA		
							Well Depth:	NA		_
							Boring:	2'		

#### CDW Consultants, Inc.

Project No.: Total Depth: 1830

15 ft Date Started: 12/9/2019 Client: Location:

Ground El.

City of Waltham 240 Beaver St

Completed: 12/9/2019

BORING ID: GP4-8 Logged By: Contractor:

Sheet #:

**AMS** Crawford

Casing ID: Remarks:

6610 DT Geoprobe

Sample Depth (Feet) Well Diagran PID Hdspace (ppmv) Recovery Depth Range Type & Num. **Sample Description** Blows per 6 Inches 48" black asphalt and graded base **S1** 0.0 tan to gray fine SAND, trace gravel with -1 broken concrete pieces; dry (FILL) -2 0.0 -3 tan to gray fine to silty fine SAND, little medium sand; dry (FILL) 4 5' 0.9 40" -5 S2 5' -6 black fine to silty fine SAND, trace medium sand, 1.9 with wood; dry -7 (FILL) -8 0.0 -9 see above with 6" concrete layer 10' 10 48" **S**3 10' 10 -10 0.8 -11 black fine to silty fine SAND, trace medium sand, 12 trace coarse sand; moist to wet -12 12 (FILL) 0.7 -13 14 -14 End of Boring at 15 feet; No Refusal 15' -15 -16 -17 -18 -19 -20 **Groundwater Measurements** Summary Depth to Groundwater Measuring Point Overburden: Fill; Sand Date Time NA Rock: Well Depth: NA Boring: 15'

#### CDW Consultants, Inc.

Project No.: 1830 Total Depth:

15 ft Date Started: 12/9/2019 Client: Location:

Ground El.

City of Waltham 240 Beaver St Completed: 12/9/2019

BORING ID: GP4-7 Logged By: Contractor:

Sheet #:

AMS Crawford

Casing ID: Remarks:

<del>-</del>		Samp	le		T T		E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0	black asphalt and graded base	
					0.0	S CAND I	
-1					2	tan to gray fine SAND, trace gravel with broken concrete pieces; dry	
-2					2	(FILL)	
					1.3		
-3					1	tan to gray fine to silty fine SAND,	
-4					4	little medium sand; dry	
			5'		1.1		
-5	S2		5'	48"	' ' '		
-6					6		
-0					6	black fine to silty fine SAND, trace medium sand,	
-7					0.9	with wood; dry	
					8	(FILL)	
-8					8		
.9					0.3	see above with 6" concrete layer	
		·	10'		10	(FILL)	
10	S3		10'	60"	10		
4.4					2.6		
·11					12	black fine to silty fine SAND, trace medium sand,	
12					12	trace coarse sand; moist to wet	
					1.3		
13							
14		***************************************			14		
17			15'			End of Boring at 15 feet; No Refusal	
15						- '	
46							
16							
17							
-18							
-19							
·20							
					Ĺ		·
	ate	Groundy Time	vater Me Depth to				
	vale	111116	Dehiii 10	Ground	uwatel	Rock: NA	
						Well Depth: NA	
						Boring: 15'	

#### **CDW Consultants, Inc.**

Project No.: Total Depth: 1830

15 ft Date Started: 12/9/2019

Client: Location: City of Waltham 240 Beaver St

BORING ID: GP4-6 Logged By: Contractor:

AMS Crawford

Casing ID: Remarks:

6610 DT Geoprobe

Completed: 12/9/2019 Ground El. Sheet #:

£		Samp	le				2
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Month Dispersion
0	S1		0'	40"	0		
-1					0.0	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry	
-2					2	(FILL)	
					0.0	to the supplier to silk fine CAND	
-3					4	tan to gray fine to silty fine SAND, little medium sand with wood and glass; dry	
-4					4	(FILL)	
-5	S2		5' 5'	48"	0.1		
-6					6 6		
					0.0	ราสารา ที่เราะ (เประทัน) ที่ทอง มีรักษายัง เกลเจล เกาสเต็มที่เราะ รสตินยัง เราะ	
-7					8	out broken gless hoesh ពីក្រី (Fills)	
-8					8		
					1.6		
-9			10'		10		
-10	S3		10'	45"	10	gray to black fine SAND, little gravel, trace silt with wood; moist	
-11					0.0	(FILL)	
-12					12 12	Approximate Water Table	
					0.1	gray fine to silty fine SAND, trace medium sand,	
-13					14	trace coarse sand with gravel pieces; moist to wet	
-14			4.51		, , ,		
-15			15'			End of Boring at 15 feet; No Refusal	
-16							
-17							
-18							
-19							
-20							
		Ground					·
	Date	Time				Measuring Point Overburden: Fill; Sand	
						Rock: NA	
						Well Depth: NA	
			<u></u>			Boring: 15'	

#### **CDW Consultants, Inc.**

Project No.: Total Depth:

1830 15 ft

Client: Location: Date Started: 12/9/2019

City of Waltham 240 Beaver St

Ground El.

BORING ID: GP4-5 Logged By: Contractor: Completed: 12/9/2019

Sheet #:

AMS Crawford

Casing ID: Remarks:

et)		Samp	le				1
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	more of HoW
0	S1		0'	40"	0	to to have a CAND Bulle access and	
-1					0.0	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	
-2					2	(	_
-3					0.9	tan to gray fine to silty fine SAND, little medium sand with wood and glass; dry	
-4					4	(FILL)	
-5	S2		5' 5'	48"	0.1		
-6					6		
-7					0.6	s, ack ing se sitte hos SRAD (transemestivin same). V promoter (an Glass, malain (17)	
-8					8	Wilder	
<b>-</b> 9					0.4		
-10	S3		10'	40"	10 10	gray to black fine SAND, little gravel,	
-11					0.0	trace silt with wood; moist (FILL)	
-12	-				12 12	Approximate Water Table	
-13					0.1	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet	
-14			15'		14		
-15						End of Boring at 15 feet; No Refusal	
-16							
-17							
-18							
-19							
-20							
		Ground	vater Me	asure	ments	Summary	
D	ate	Time				Measuring Point Overburden: Fill; Sand	
						Rock: NA	
						Well Depth: NA Boring: 15'	
			<u> </u>			Boring: 15'	

#### **CDW** Consultants, Inc.

Project No.: Total Depth:

1830 15 ft

Client: Location:

Ground El.

Completed: 12/9/2019

City of Waltham 240 Beaver St

Logged By:

BORING ID: GP4-4 AMS

Date Started: 12/9/2019 Casing ID: Remarks:

6610 DT Geoprobe

Contractor: Sheet #:

Crawford 1

Sample  Sample  Sample  Sample  Sample Description  Sample Description  Sample Description  Sample Description  O S1 O' 40" O  tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry  (FILL)	low.
0 S1 0' 40" 0 tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	10/0/
-1 trace medium sand with wood and gravel; dry	
-3 tan to gray fine to silty fine SAND, little medium sand with wood and glass; dry	:
-4 (FILL)	
-5 S2 5' 48" 0.9	
-6 6 6 Sections of situation Section (1997)	
-7	
-8 8	
-9 0.7 10' 10	
-10 S3 10' 40" 10 gray to black fine SAND, little gravel, trace silt with wood; moist	
11 0.2 (FILL)	
-12   12 Approximate Water Table	
gray fine to silty fine SAND, trace medium sand trace coarse sand with gravel pieces; moist to we	
-14 15' 14	
-15 End of Boring at 15 feet; No Refusal	
-16	
-17	
-18	
-19	
20	
Groundwater Measurements Summary	
Date Time Depth to Groundwater Measuring Point Overburden: Fill; Sand	
Rock: NA	
Well Depth: NA Boring: 15'	

### **CDW Consultants, Inc.**

Project No.: Total Depth:

1830

15 ft Date Started: 12/9/2019 Client: Location:

Ground El.

City of Waltham 240 Beaver St Completed: 12/9/2019

Logged By: Contractor: Sheet #:

BORING ID: GP4-3 AMS Crawford

Casing ID: Remarks:

at)		Samp	le				
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	:
0	S1		0'	40"	0	Con CAND But a come and	
-1					0.0	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	
-2					2	(11-2)	
-3					0.0	tan to gray fine to silty fine SAND,	
-4				:	4	little medium sand with wood and glass; dry (FILL)	
			5'		0.9	( /	
-5	S2		5'	48"	6		
-6					6		
<del>-</del> 7					1.2	para mite is suivinna E. Nibrarese medirini Sandi. ក្រុង រាស់សុខ ខ្លាំងទទ នាព្យាសុខម៉ែងសុវាសុខ ទី១៨ភូមិន	
					8		
-8					0.7		
-9			10'		10		
-10	S3		10'	40"	10		
-11					0.2	gray fine to silty fine SAND, trace medium sand, moist	
-12					12 12	Approximate Water Table	
-13					0.1	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet	
					14	1	
-14			15'				
-15					<b> </b>	End of Boring at 15 feet; No Refusal	
-16							
-17							
-18							
-19							
-20							
		Ground	water Me	asure	ment	Summary	
	Date	Time				Measuring Point Overburden: Fill; Sand	
						Rock: NA Well Depth: NA	
		L	L			Boring: 15'	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830 15 ft

Client:

City of Waltham

BORING ID: GP4-2

Date Started: 12/9/2019

240 Beaver St Location: Completed: 12/9/2019

Logged By: Contractor:

AMS Crawford

Casing ID: Remarks:

Sheet #: Ground El. 6610 DT Geoprobe

£		Samp	le				am
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0		
					0.1	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry	
-1					2	(FILL)	
-2					2	(1.1=1)	
					0.0		
-3					0.0	tan to gray fine to silty fine SAND,	
					4	little medium sand with wood and glass; dry (FILL)	
-4			5'			(1 122)	
-5	S2		5'	48"	0.1		
					6		
-6			<u> </u>		6	ក្រុងប្រជាពលរដ្ឋ ក្រុង Sayle ប្រទេសប្រជាពលរដ្ឋបាលទៅស៊ី	
-7					0.1	tropica i gjalski aspirattioterek, pontereta i terek, dip	
					8	FILLE	
-8					8		
			<u> </u>		0.3	Approximation	
-9		<u> </u>	10'		10		
-10	S3		10'	60"	10		
					0.9	gray fine to silty fine SAND, trace medium sand,	
-11					ļ	moist	
-12				<u> </u>	12	Approximate Water Table	
-12						gray fine to silty fine SAND, trace medium sand,	
-13					0.6	trace coarse sand with gravel pieces; moist to wet	
					14		
-14			15'				
-15			10		1	End of Boring at 15 feet; No Refusal	
-16							
	ļ	<b> </b>	<u> </u>		4		
-17	<del>                                     </del>			<u> </u>	+		
-18	-						
-19			<u> </u>				
-20			<del> </del>	<del>                                     </del>	<del> </del>	1	
-20	<u> </u>				<del>                                     </del>		
	.1	Ground	water M	easur	ement	s Summary	
	Date	Time	Depth to	Grour	ndwater	Measuring Point Overburden: Fill; Sand	
		<u> </u>	<u> </u>			Rock: NA Well Depth: NA	
		<del> </del>	<del> </del>	·		Boring: 15'	
		1	<u></u>			I I I I I I I I I I I I I I I I I I I	

### **CDW** Consultants, Inc.

Project No.: Total Depth: 1830 15 ft

Date Started: 12/9/2019

Client: Location:

Ground El.

Completed: 12/9/2019

City of Waltham 240 Beaver St

BORING ID: GP4-1 Logged By:

AMS

Casing ID: Remarks:

6610 DT Geoprobe

Contractor: Crawford Sheet #:

<del>2</del>		Samp	le		T		,	
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)		Sample Description	
0	S1		0'	40"	0			
-1					0.1	trace medi	wn fine SAND, little coarse sand im sand with wood and gravel; dry (FILL)	
-2					2		ViiC)	
-3					0.0	tan to	gray fine to silty fine SAND,	
					4		nedium sand with glass; dry	
-4	<u> </u>		5'		4		(FILL)	
-5	S2		5'	48"	0.1			
-6					6			
<b>-</b> 7					0.1		silty fine SAND, trace medium sand ken glass, concrete pieces; dry	١,
					8		(FILL)	
-8					8			
-9					0.3			
-10	S3		10' 10'	60"	10 10			
-11					0.9		See Above	
					12			
-12					12	Approximate Water Table	ilty fine SAND, trace medium sand	
-13					0.6		and with gravel pieces; moist to we	
-14					14			
-15	S4		15' 15'			End of	Boring at 15 feet; No Refusal	
-16								
-17								
-18								
-19								
-20								
		Groundy					Summary	
D	ate	Time	Depth to	Ground	dwater	Measuring Point		
<del></del>			X				Rock: NA Well Depth: NA	
							Boring: 15'	

### **CDW Consultants, Inc.**

Project No.: Total Depth: 1830

2 ft Date Started: 12/9/2019

Client: Location:

Ground El.

City of Waltham

BORING ID: GP3-1 240 Beaver St Logged By: Completed: 12/9/2019 Contractor:

Sheet #:

AMS Crawford

Casing ID: Remarks:

4		Samp	ole				7
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Moll Diagram
)	S1		0'	18"	0.0	brown loamy soil	
				ļ	0.0		
1			-	ļ		tan to brown loamy soil with brown fine SAND	
2						End of Boring at 2 feet; Refusal at 2 ft	1.2
3							
4							
-5							
-6							
-7							
-8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
		Ground					<b>_</b>
D	ate	Time	Depth to	Groun	dwater	Measuring Point Overburden: Loamy soil	
			ļ			Rock: NA Well Depth: NA	
_			<u> </u>			Boring: 2 ft	

#### CDW Consultants, Inc.

Project No.: 1830 Client: City of Waltham BORING ID: GP3-2 Total Depth: 2 ft
Date Started: 12/9/2019 Location: 240 Beaver St Logged By: AMS Completed: 12/9/2019 Contractor: Crawford Casing ID: Ground El. Sheet #: 1

	Remarks: 6610 DT Geoprobe			nd EI Sneet #:	-		
Ð	1	Sam	ple		Τ		E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	18"	0.0	brown loamy soil	
-1						tan to brown loarny soil with brown fine SAND	
-2					<u> </u>	End of Boring at 2 feet; Refusal at 2 ft	
-3							
-4							
-5							
-6							
-7							
-8							
-9							
-10							
-11							
-12							
-13							
-14							
-15							
-16							
-17							
-18							
-19							
-20							
							<u> </u>
	-4-		water Me				
ט	ate	Time	Depth to	Ground	owater	Measuring Point Overburden: Loamy soil Rock: NA	
			<del> </del>			Well Depth: NA	
			1			Boring: 2 ft	

## **CDW Consultants, Inc.**

Project No.:	1830	Client:	City of Waltham	BORING ID:	GP3-3
Total Depth:	2 ft	Location:	240 Beaver St	Logged By:	AMS
Date Started:	12/9/2019	Completed:	12/9/2019	Contractor:	Crawford
Casing ID:		Ground El.		Sheet #:	1
Remarks:	6610 DT Geoprobe				_

₽.		Samp	le		T		m
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0,	18"	0.0	brown loamy soil	
					0.0		
-1			ļ			tan to brown loamy soil with brown fine SAND	
-2					┨	End of Boring at 2 feet; Refusal at 2 ft	
			<del>                                     </del>			Zild of Dorning at 2 root, the account at 2 ro	
-3							
			<u> </u>	ļ	-		
-4							
-5							
-6					<u> </u>		
-7					-		
-/							
-8					1		
-9			ļ	ļ			
-10				<del>                                     </del>	1		
-10				·····			
-11							
				ļ	1		
-12				ļ	<b>-</b>		
-13				<u> </u>	<b></b>		
-14							
46					<u> </u>		
-15					-		
-16					1		
-17					<b> </b>		
-18	·			-	-		
-10			<del>                                     </del>		1		
-19					1		
-20							
		Ground	vater M	easure	ment	Summary	L
	ate	Time	Depth to	Groun	dwater	Measuring Point Overburden: Loamy soil	
						Rock: NA	
						Well Depth: NA	•••
						Boring: 2 ft	

#### CDW Consultants, Inc.

1830 Client: City of Waltham BORING ID: GP3-4 Project No.: Logged By: Contractor: 9 ft 240 Beaver St AMS Total Depth: Location: Date Started: 12/9/2019 Completed: 12/9/2019 Crawford Casing ID: Ground El. Sheet #:

Remarks: 6610 DT Geoprobe

Fee		Samp				<u> </u>	=
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	30"	0.0	4" Leaf Litter	
-1					1	broken glass pile	
<u>-,                                     </u>					1	broken glass pile	
-2					0.1	tan to brown fine to silty fine SAND, trace	
			ļ		3	gravel, glass, wood, possible coal ash	
-3					3		
-4					1.2	black silty fine SAND, little coarse sand,	
			5'		5	trace gravel and wood, broken pieces of coal	
-5			5'	48"	5		
-6					0.8		
-0					7		
-7					7	tan to brown silty fine SAND, little medium sand,	
					0.2	trace gravel: moist to wet	
-8							
-9					9	End of Boring at 9 feet; No Refusal	
			10'			End of Borning at 5 1001, No Rollada.	
-10		***************************************					
-11							
-12							
-13							
-14							
-14							
-15				-			
-16							
-17							
-18							
-19							
-20							
		Groundy					
D	ate	Time	Depth to	Ground	dwater		
						Rock: NA Well Depth: NA	
						Boring: 9 ft	
			· · · · · · · · · · · · · · · · · · ·			12-11-19	

## **CDW Consultants, Inc.**

Project No.:	1830	Client:	City of Waltham	BORING ID:	GP3-5
Total Depth:	9 ft	Location:	240 Beaver St	Logged By:	AMS
Date Started:	12/9/2019	Completed:	12/9/2019	Contractor:	Crawford
Casing ID:		Ground El.		Sheet #:	1
Remarks:	6610 DT Geoprobe				

Sample Description   Sample	<del>2</del>		Samp	le				Ę٦
O	Depth (Feet)	Type & Num.		Depth Range		PID Hdspace (ppmv)		Well Diagram
-2	0	S1		0'	30"	I .	4" Leaf Litter	
tan to brown fine to silty fine SAND, trace gravel, glass, wood, possible coal ash  1.7  1.7  5' 5' 5'  -5 5' 5'' 5  -7 7 7  -7 7 7  -8 9 9 10'  -9 10'  -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -19 -19 -19 -19 -19 -19 -19 -19 -19	-1					1	broken glass pile	
1.7	-2							
1	-3					3		
S	-4			5'			i Dijang shilo jing SolikiD ililing qaransa sampilg Tarang ililawa an Gwyapin sharkan wasasa Miyasa	
1	-5				50"			
-7	-6							
-8	-7							
-9	-8					]	trace gravel: moist to wet	to Antioppe special section in the section is a section in the section in the section is a section in the section in the section is a section in the section in the section in the section is a section in the section i
-10	-9			10'		9	End of Boring at 9 feet; No Refusal	
-12	-10			10				
-14	-11							
-14	-12							
-15	-13							
-16	-14							
-17	-15							
-18	-16							
-19 -20  Groundwater Measurements Date Time Depth to Groundwater Measuring Point Rock: NA Well Depth: NA	-17							
-20  Groundwater Measurements  Date  Time  Depth to Groundwater Measuring Point  Rock:  NA  Well Depth:  NA	-18							
Groundwater Measurements  Date Time Depth to Groundwater Measuring Point Rock: NA Well Depth: NA	-19							
Date Time Depth to Groundwater Measuring Point Overburden: Fill, Sand Rock: NA Well Depth: NA	-20							
Date Time Depth to Groundwater Measuring Point Overburden: Fill, Sand Rock: NA Well Depth: NA						]		
Rock: NA Well Depth: NA		late T						
Well Depth: NA	U	alt	rime	Depth to	Ground	water		
L l lesing. On								
						1	12-3-3	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830 9 ft

Client: Location:

City of Waltham 225-227 Beaver St BORING ID: GP2-3 Logged By: Contractor:

AMS

Date Started: 5/28/2019 Casing ID: Remarks:

6610 DT Geoprobe

Completed: 5/28/2019 Ground El. Sheet #:

Crawford

Đ.	Sample						E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0.0	brown loamy soil	
-1					1 0.0	tan to brown fine SAND, trace coarse sand with gravel; dry	
-2					<b> </b>		
-3					3	brown fine SAND, 8" coarse sand layer,	
-4			5'		0.0 5	gray gravel with silt lenses; dry	
-5	S2		5'	36"	5	brown fine SAND, trace medium sand	
-6					0.0	with gravel and silt lenses; dry	
-7					7		
-8					0.0		
-9			10'			End of Boring at 8 feet; Refusal at 9 ft	
-10							
-11							
-12							
-13							
-14			***************************************				4
-15							
-16							
-17							
-18							
-19				-			
-20						Note: 2 additional attaches did not dell ===+0 fa-t	
	l	Groundw	rater Me	asure		Note: 3 additional attempts did not drill past 9 feet Summary	
	ate		Depth to			Measuring Point Overburden: Fill; Sand	
						Rock: NA	
						Well Depth: NA	
						Boring: 9 ft	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830 9 ft Date Started: 5/28/2019 Client: Location:

Ground El.

City of Waltham 225-227 Beaver St Completed: 5/28/2019

BORING ID: GP2-2 Logged By: Contractor:

Sheet #:

AMS Crawford

Casing ID: Remarks:

et)		Samp	le				
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	
0	S1		0,	40"	0.0	brown loamy soil	
-1					1	tan to brown fine SAND,	
					0.0	trace coarse sand with gravel; dry	
-2					3		
-3		***************************************			3		
-4					0.0	See Above	
			5'		5		
-5	S2		5'	36"	5	brown fine SAND, trace medium sand	
-6					0.0	with gravel and silt lenses; dry	
-7					7		
					0.0		
-8					9		
.9						End of Boring at 8 feet; Refusal at 9 ft	
-10			10'		ļ		
-11							
-12					•		
-13							
-13							
-14							
-15							
4.0							
16					<u> </u>		
-17							
-18							
19							
20							
		Groundy	vater Me	asure	ments	Note: 3 additional attempts did not drill past 9 feet Summary	
D	ate	Time	Depth to			Measuring Point Overburden: Fill; Sand	
						Rock: NA Well Depth: NA	
						Boring: 9 ft	

#### **CDW Consultants, Inc.**

Project No.: 1830 Client: City of Waltham BORING ID: GP2-1 Total Depth: 8 ft 225-227 Beaver St Logged By: AMS Location: Contractor: Date Started: 10/10/2019 Crawford Completed: 5/28/2019 Ground El. Sheet #: Casing ID:

Remarks: 6610 DT Geoprobe

et)		Samp	le				3
Depth (Feet)	C Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0.0	brown loamy soil	
-1						tan to brown fine SAND,	
-1	ļ				1	trace corse sand with gravel; dry	
-2					0.0	udos cores cana man gravon, a.y	
					3		
-3					3		
4					0.0	See Above	
-4			5'		5		
·5	S2		5'	36"	5		
					0.0	brown fine SAND, trace medium sand	
·6					<u> </u>	with gravel and silt lenses; dry	
<del>-,</del>					7		
7					7		
-8					0.0	End of Boring at 8 feet; Refusal at 8 ft	
					9		
9							
40			10'				
·10							
·11						·	
·12							
40							
-13							
·14							
15							
40							
16							
17							
18							
]							
19							
20							
						Note: 3 additional attempts did not get past 9 feet	
		Groundy			ments	Summary	
D	ate		Depth to			Measuring Point Overburden: Fill; Sand	
						Rock: NA	
						Well Depth: NA Boring: 8 ft	
						Boring: 8 ft	

### **CDW** Consultants, Inc.

Sheet #:

AMS

Crawford

1830 20 ft Project No.: Client: City of Waltham Total Depth: Location:

BORING ID: GP1-8 Logged By: 240 Beaver St Contractor: Completed: 5/28/2019

Date Started: 5/28/2019 Casing ID: Ground El. Remarks:

Sample   S	₩.		Samp	le		J		ад
S1	Depth (Fee	Туре & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
1	0			0'	40"		black asphalt and graded base	
Commonwealth   Comm	1				ļ	0.0	ton to gravefing SAND trace gravel with	
2	F'-				<u> </u>	2		
tan to gray fine to sity fine SAND, little medium sand; dry    1	-2					2		
1					<u> </u>	0.8	ton to grow fine to silty fine SAND	
4	-3					4		
1.5   S2   5'   48"   1.7   6   6   6   6   6   6   6   6   6	-4				<b>†</b>	4		
6				<u> </u>		1.1		
Company	-5	S2		15,	48"	ļ		ŀ
-7	-6							
-7						0.9		
B	-7						1	
-9	-8	<u> </u>						
10'   10   10   10   10   10   10   10						16		
10   S3	-9			40				
11	-10	S3			1	<del></del>		
12					- 55			
12	-11							
-13	12							- 1
-13	-12						trace coarse sand with graver pieces, moist to wet	- 1
14	-13					1.3		
15'   0.7     -15   S4   15'     16     -16	14							
-15	-14			15'				
-16	-15	S4				0.7		
-17	46							
-17 gray fine to sity fine SAND, trace medium sand, trace coarse sand with silt lenses; wet  -18	-16							
-18	-17					0.1		
-19 0.0  -20 End of Boring at 20 feet; No Refusal  Groundwater Measurements Summary								
-19 20' 20 End of Boring at 20 feet; No Refusal  Groundwater Measurements Summary	-18					18		
-20 End of Boring at 20 feet; No Refusal  Groundwater Measurements Summary	-19					0.0		
Groundwater Measurements Summary				20'		20		
	-20						End of Boring at 20 feet; No Refusal	
	$\vdash$	Groundwater Measure		mente	Summary			
Date   time  Depth to Groundwater  Measuring Point  Overburden, Pin, Sand							Measuring Point Overburden: Fill; Sand	
Rock: NA				•			Rock: NA	
Well Depth: NA Boring: 20'								
Boring: 20'	<b></b>		······································				journig. Zu	$\dashv$

#### CDW Consultants, Inc.

Project No.: Total Depth: 1830 20 ft

Client: City of Waltham Location: 240 Beaver St

Logged By:

BORING ID: GP1-7MW AMS

Date Started: 5/28/2019 Casing ID: Remarks:

6610 DT Geoprobe

Completed: 5/28/2019 Contractor: Crawford Sheet #: Ground El.

et	Sample			Γ.			a a	
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)		Sample Description	Well Diagram
0	S1		0'	40"	0			Π
					0.1		own fine SAND, little coarse sand	
-1						trace med	ium sand with wood and gravel; dry	
-2			<del> </del>		2		(FILL)	
					0.0			
-3					0.0		o gray fine to silty fine SAND,	
-4					4	little medi	um sand with wood and glass; dry	
-4			5'					
-5	S2		5'	48"	0.1			
					6			
-6					6			
-7					0.1		silty fine SAND, trace medium sand, s, asphalt pieces, concrete pebbles; dry	
<del>-</del> /					8	with broken gias	ss, aspiral pieces, concrete peobles, dry	
-8					8			
					0.3			
-9			101				9	
-10	S3		10' 10'	60"	10 10			
-10	- 55	-	10	00				
-11					0.9		See Above	
					12			
-12					12	Approximate Water Table	ollin fine CAND, trace medium cond	
-13					0.6		silty fine SAND, trace medium sand, sand with gravel pieces; moist to wet	
<del></del>					14		Sand With graver pleases, molecule wet	
-14					14			
			15'		0.1			
-15	S4		15'		16			
-16					16			
-17					0.0		silty fine SAND, trace medium sand,	
40					18	trace c	oarse sand with silt lenses; wet	
-18					18			
-19		. 1007. **			0.0			
			20'		20			
-20						End of	Boring at 20 feet; No Refusal	
							0	
	ate	Groundy Time					Summary Overburden: Fill; Sand	
	ale	THIE	Debit (0	Ground	watei	wicasumy Fullit	Rock: NA	
							Well Depth: NA	
							Boring: 20'	

#### CDW Consultants, Inc.

Project No.: Total Depth: 1830

20 ft Date Started: 5/28/2019

Client: Location: City of Waltham 240 Beaver St

Logged By: Contractor:

BORING ID: GP1-6 AMS Crawford

Casing ID: Remarks:

6610 DT Geoprobe

Completed: 5/28/2019 Ground El. Sheet #:

Sample Depth (Feet) Well Diagran PID Hdspace (ppmv) Recovery Type & Num. Depth Range Blows per 6 Inches **Sample Description S1** 0' black asphalt and graded base 0.0 -1 tan to gray fine SAND, trace gravel with broken concrete pieces; dry 0.0 -2 (FILL) tan to gray fine to silty fine SAND, -3 little medium sand; dry 0.0 4 5' 5 -5 S2 5' 48" 5 0.0 -6 gray fine to silty fine SAND, trace medium sand, with pebbles; dry -7 0.0 -8 -9 10' 0.1 60" -10 **S3** 10' 11 11 -11 gray fine to silty fine SAND, trace medium sand, 0.1 -12 trace coarse sand with gravel pieces; moist to wet 13 -13 13 0.0 -14 15' 15 -15 **S4** 15' 15 0.1 -16 -17 17 gray fine to silty fine SAND, trace medium sand, trace coarse sand with silt lenses; wet -18 0.0 -19 20 20 -20 End of Boring at 20 feet; No Refusal **Groundwater Measurements** Summary Depth to Groundwater Measuring Point Overburden: Fill; Sand Date Rock: NA Well Depth: NA 20' Boring:

### **CDW Consultants, Inc.**

Project No.:	1830	Client:	City of Waltham	BORING ID:	GP1-5MW
Total Depth:	20 ft	Location:	240 Beaver St	Logged By:	AMS
Date Started:	5/28/2019	Completed:	5/28/2019	Contractor:	Crawford
Casing ID:		Ground El.		Sheet #:	•
Remarks:	6610 DT Geoprobe				

Ð	Sample				<u> </u>				
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram		
0	S1		0'	40"	0.0	black asphalt and graded base			
-1			ļ		1	tan to gray fine SAND, trace gravel with			
				<u></u>	<del> </del>	broken concrete pieces; dry			
-2					0.0	(FILL)			
					3				
-3					3	tan to gray fine to silty fine SAND, little medium sand; dry			
-4					0.0	ilitile ilieululii sariu, ury			
			5'		5				
-5	S2		5'	48"	5				
6	ļ				0.0				
-6	l				7	gray fine to silty fine SAND, trace medium sand,			
-7					7	with pebbles; dry			
					0.0				
-8									
-9					9				
-5			10'						
-10	S3		10'	60"	0.1				
					11	Approximate Water Table			
-11					11				
-12					0.1				
					13	gray fine to silty fine SAND, trace medium sand,			
-13					13	trace coarse sand with gravel pieces; moist to wet			
-14					0.0				
- 144			15'		15				
-15	S4		15'		15				
					0.1				
-16			<u> </u>		17				
-17					17	gray fine to silty fine SAND, trace medium sand,			
						trace coarse sand with silt lenses; wet			
-18					0.0				
40		····							
-19			20'		20				
-20						End of Boring at 20 feet; No Refusal			
						_			
		Ground							
	ate	Time	Depth to	Ground	dwater	Measuring Point Overburden: Fill; Sand Rock: NA			
				<del>,</del>		Well Depth: NA			
						Boring: 20'			

#### **CDW Consultants, Inc.**

Project No.: Total Depth: 1830

20 ft Date Started: 5/28/2019 Client: Location: City of Waltham 240 Beaver St

BORING ID: GP1-4 Logged By: Contractor:

AMS Crawford

Casing ID:

Remarks:

6610 DT Geoprobe

Completed: 5/28/2019
Ground El. Sheet #:

<del>(</del>		Samp	ole				Ę	
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	merocial IIo/W	
0	S1		0'	40"	0.0	black asphalt and graded base		
4			<del> </del>		ļ	ten to service CAND become unitable		
-1					1	tan to gray fine SAND, trace gravel with broken concrete pieces; dry		
-2					0.0	(FILL)		
					3	to the second se		
-3					3	tan to gray fine to silty fine SAND, little medium sand; dry		
-4					0.0	india instituti santa, ary		
			5'		5			
-5	S2		5'	48"	5			
-6					0.0			
					7	gray fine to silty fine SAND, trace medium sand,		
-7					7	with pebbles; dry		
-8					0.0			
					9			
-9			401		9			
-10	S3		10'	60"	0.1			
					11			
-11					11			
-12					0.1	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet		
-12					13	trace coarse sailt with graver pieces, moist to wet		
-13					13			
4.4					0.0			
-14			15'		15			
-15	S4		15'		15			
40					0.1			
-16					17			
-17					17	gray fine to silty fine SAND, trace medium sand,		
						trace coarse sand with silt lenses; wet		
-18					0.0			
-19								
			20'		20			
-20						End of Boring at 20 feet; No Refusal		
		Ground	water Me	acuro	ments	Summary		
D	ate	Time				Measuring Point Overburden: Fill; Sand		
						Rock: NA		
						Well Depth: NA		
			<u> </u>			Boring: 20'		

#### **CDW** Consultants, Inc.

Project No.:

1830

Client: City of Waltham 240 Beaver St

BORING ID: GP1-3MW

Total Depth:

20 ft Date Started: 5/28/2019 Location: Completed: 5/28/2019 Ground El.

Logged By: Contractor: Sheet #:

AMS Crawford

1

Casing ID: Remarks:

₹	Sample				<u> </u>		a
Depth (Feet)	Туре & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0.0	black asphalt and graded base	
-1					1	tan to gray fine SAND, trace gravel with broken concrete pieces; dry	
-2					0.0	(FILL)	
-3					3	tan to gray fine to silty fine SAND,	
					0.0	little medium sand; dry	
-4			5'		5		
-5	S2		5'	48"	5		
-6				<u> </u>	0.0		
	ļ				7	gray fine to silty fine SAND, trace medium sand,	
-7					7	with pebbles; dry	
-8					0.0		
-9	ļ				9		
-3			10'		0.1		
-10	S3		10'	60"	11		
-11					11		
40					0.1	Approximate Water Table	
-12					13	gray fine to silty fine SAND, trace medium sand,	
-13					13	trace coarse sand with gravel pieces; moist to wet	
-14					0.0		
			15'		15		
-15	S4		15'		15		
-16					0.1		
-17					17 17	gray fine to silty fine SAND, trace medium sand,	
					''	trace coarse sand with silt lenses; wet	
-18					0.0		
-19							
			20'		20	Fod of Design at 20 feets No Deferred	
-20						End of Boring at 20 feet; No Refusal	
		Groundy					
	Date	Time	Depth to	Ground	dwater	Measuring Point Overburden: Fill; Sand	
<b> </b>					:	Rock: NA Well Depth: NA	
<b></b>	·			······································		Boring: 20'	

#### CDW Consultants, Inc.

Project No.: Total Depth: 1830 20 ft

Client: Location: Completed: 5/28/2019

Ground El.

City of Waltham 240 Beaver St

BORING ID: GP1-2 Logged By: Contractor:

AMS Crawford

Date Started: 5/28/2019 Casing ID: Remarks:

6610 DT Geoprobe

Sheet #:

£		Samp	le				me
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0.0	black asphalt and graded base	
-1					1	tan to gray fine SAND, trace gravel with	
					0.0	broken concrete pieces; dry	
-2					3	(FILL)	
-3					3	tan to gray fine to silty fine SAND,	
-4					0.0	little medium sand; dry	
_	S2		5' 5'	48"	5		
-5	52		0	40	5		
-6					0.0	grow fine to gifty fine CAND, trace madium and	
-7					7	gray fine to silty fine SAND, trace medium sand, with pebbles; dry	
0					0.0		
-8					9		
-9			10'		9		
-10	S3		10'	60"	0.1		
44					11 11		
-11					0.1	gray fine to silty fine SAND, trace medium sand,	
-12						trace coarse sand with gravel pieces; moist to wet	
-13					13 13		
-14					0.0		
-14			15'		15		
-15	S4		15'		15		
-16					0.1		
17					17 17	grow fine to eith, fine SAND, trace modium and	
-17					17	gray fine to silty fine SAND, trace medium sand, trace coarse sand with silt lenses; wet	
-18					0.0		
-19							
			20'		20	End of Daving at 20 facts No Deficed	
-20						End of Boring at 20 feet; No Refusal	
		Groundy					
D	ate	Time	Depth to	Ground	water	Measuring Point Overburden: Fill; Sand Rock: NA	•
						Well Depth: NA	
						Boring: 20'	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830 20 ft

Client: Location:

City of Waltham 240 Beaver St

Logged By:

BORING ID: GP1-1 AMS

Date Started: 5/28/2019 Casing ID: Remarks:

6610 DT Geoprobe

Completed: 5/28/2019 Contractor: Ground El. Sheet #:

Crawford

Sample Well Diagram Depth (Feet) PID Hdspace (ppmv) Recovery Type & Num. Depth Range Blows per 6 Inches Sample Description S1 black asphalt and graded base 0.0 -1 tan to gray fine SAND, trace gravel with broken concrete pieces; dry 0.0 (FILL) -2 -3 tan to gray fine to silty fine SAND, little medium sand; dry 0.0 -4 5' -5 S2 48" 5 0.0 -6 gray fine to silty fine SAND, trace medium sand, with pebbles; dry -7 0.0 -8 9 -9 10' 0.1 -10 S3 10' 60" 11 -11 11 gray fine to silty fine SAND, trace medium sand, 0.1 -12 trace coarse sand with gravel pieces; moist to wet 13 -13 13 0.0 -14 15 **S4** 15' -15 15 0.1 -16 17 -17 17 gray fine to silty fine SAND, trace medium sand, trace coarse sand with silt lenses; wet -18 0.0 -19 20' 20 -20 End of Boring at 20 feet; No Refusal **Groundwater Measurements** Summary Depth to Groundwater Measuring Point Overburden: Fill; Sand Date Rock: NA Well Depth: NA 20' Boring:



December 16, 2019

Alan Sundquist CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

Project Location: 225-227 Beaver St, Waltham, MA

Client Job Number: Project Number: 1830

Laboratory Work Order Number: 19L0396

Michelle Koch

Enclosed are results of analyses for samples received by the laboratory on December 10, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Koch Project Manager

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CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 ATTN: Alan Sundquist

PURCHASE ORDER NUMBER:

REPORT DATE: 12/16/2019

PROJECT NUMBER:

1830

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19L0396

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

225-227 Beaver St, Waltham, MA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
GP 3-4 (3-5')	19L0396-01	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
GP 3-5 (3-5')	19L0396-02	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
GP 3-6 (2-4')	19L0396-03	Soil		MADEP-EPH-04-	1.1
)				SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	



#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

#### MADEP-EPH-04-1.1

#### Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

n-Nonane

B248185-BS1

#### SW-846 8270D-E

#### Qualifications:

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

#### Analyte & Samples(s) Qualified:

Pyrene

7L0396-01[GP 3-4 (3-5')], 19L0396-02[GP 3-5 (3-5')], 19L0396-03[GP 3-6 (2-4')], B248158-BLK1, B248158-BS1, B248158-BSD1, S043694-CCV1

#### MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C 11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington Technical Representative

na Wasslengton



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019
Field Sample #: GP 3-4 (3-5')

Sampled: 12/9/2019 13:30

Sample ID: 19L0396-01
Sample Matrix: Soil

Sample Matrix: Soil		·	Semivolatile Organic C	ompounds by	GC/MS				
A malerka	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Analyte Acenaphthene	ND	0.20	mg/Kg dry	l l	Liag/Quai	SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Acetophenone	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Aniline	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(b)fluoranthene	0.23	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Bis(2-chloroethoxy)methane	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Bis(2-chloroethyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Bis(2-chloroisopropyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Bis(2-Ethylhexyl)phthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
4-Bromophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Butylbenzylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
4-Chloroaniline	ND	0.76		ı		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2-Chloronaphthalene		0.76	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2-Chlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
·	ND		mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Chrysene	ND ND	0.20 0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Dibenz(a,h)anthracene Dibenzofuran			mg/Kg dry			SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
Di-n-butylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
1,2-Dichlorobenzene	ND	0.39	mg/Kg dry	1			12/11/19		IMR
1,3-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
1,4-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E		12/12/19 16:26	IMR
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4-Dichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Diethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
2,4-Dimethylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
Dimethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
2,4-Dinitrophenol	ND	0.76	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,6-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
Di-n-octylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
1,2-Diphenylhydrazine/Azobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
Fluoranthene	0.33	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
Hexachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
<b>Iexachlorobutadiene</b>	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
Hexachloroethane	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Isophorone	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	
								Page 5	of 36



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-4 (3-5')

Sampled: 12/9/2019 13:30

Sample ID: 19L0396-01
Sample Matrix: Soil

		Semi	volatile Organic Co	mpounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
3/4-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Nitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2-Nitrophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
4-Nitrophenol	ND	0.76	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Pentachlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
PhenoI	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Pyrene	0.31	0.20	mg/Kg dry	1	V-05	SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4,5-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
2,4,6-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:26	IMR
Surrogates		% Recovery	Recovery Limits	1	Flag/Qual	<del></del>			
2-Fluorophenol		57.3	30-130					12/12/19 16:26	
Phenol-d6		56.4	30-130					12/12/19 16:26	
Nitrobenzene-d5		51.0	30-130					12/12/19 16:26	
2-Fluorobiphenyl		65.8	30-130					12/12/19 16:26	
2,4,6-Tribromophenol		54.9	30-130					12/12/19 16:26	
p-Terphenyl-d14		62.7	30-130					12/12/19 16:26	



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019 Field Sample #: GP 3-4 (3-5')

Sampled: 12/9/2019 13:30

Sample ID: 19L0396-01 Sample Matrix: Soil

			Metals Analy	yses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:01	МЈН
Arsenic	11	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Barium	140	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Beryllium	0.31	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Cadmium	0.63	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Chromium	21	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Lead	1000	0.59	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Mercury	0.57	0.030	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 11:46	CJV
Nickel	17	0.40	mg/Kg dry	l		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Selenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Silver	0.55	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:01	МЈН
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Vanadium	41	0.79	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC
Zinc	310	0.79	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 19:54	TBC



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019
Field Sample #: GP 3-4 (3-5')

Sampled: 12/9/2019 13:30

Sample ID: 19L0396-01
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

							Date	Date/Time		
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst	
% Solids	85.4		% Wt	1		SM 2540G	12/11/19	12/11/19 15:03	adb	



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-5 (3-5')

Sampled: 12/9/2019 14:15

Sample ID: 19L0396-02
Sample Matrix: Soil

Anahyte         Rowins         Let         United         Flag         Method         Page         Disortion         Page         Disortion         Page         Disortion         Page         Disortion         Page				Semivolatile Organic C	ompounds by	GC/MS		***************************************		
Acessphelstear   ND   0.20   mg/Kg dry   1   SW-466 8270D-E   1271119   1212179 (6.51   MR   Acessphelstear   ND   0.40   mg/Kg dry   1   SW-466 8270D-E   127119   1212179 (6.51   MR   Acessphelstear   ND   0.40   mg/Kg dry   1   SW-466 8270D-E   127119   1212179 (6.51   MR   Acessphelstear   ND   0.40   mg/Kg dry   1   SW-466 8270D-E   127119   1212179 (6.51   MR   Acessphelstear   ND   0.40   mg/Kg dry   1   SW-466 8270D-E   127119   1212179 (6.51   MR   MR   MR   MR   MR   MR   MR   M								Date	Date/Time	
Accomplaymence         ND         0.00         mg/Kg day         1         SN-446 82700-E         121119         1211291 511         RB           Accidations         ND         0.40         mg/Kg day         1         SN-446 82700-E         121119         1211291 615         RB           Authinace         0.40         0.20         mg/Kg day         1         SN-446 82700-E         12119         1211291 615         RB           Authinace         2.2         0.2         mg/Kg day         1         SN-446 82700-E         12119         1211291 615         RB           Bames(shymen         2.0         0.2         mg/Kg day         1         SN-446 82700-E         12119         1211191 51         MB           Bames(shymen         3.2         0.2         mg/Kg day         1         SN-446 82700-E         12119         1211915 51         MB           Bemes(shymen         8.2         0.2         mg/Kg day         1         SN-446 82700-E         12119         1211916 51         MB           Bemes(shymen         8.0         0.4         mg/Kg day         1         SN-446 82700-E         12119         1211916 51         MB           Bill-C-shincordinysheme         10         0.4         mg/Kg day	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acetophenono	Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Authinate   No   0.40   mg/kg dry   1   SW-46 6270D-E   121119   121219 1651   1814	Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Authore	Acetophenone	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Remo(planthracenes   2,	Aniline	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Benzo(a)pyrene   2,0	Anthracene	0.48	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bennot(o) flooranthene	Benzo(a)anthracene	2.2	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Benzo(g,h)perylene   0,82   0,20   mg/Kg dy   1   SW-446 8270D-E   1211/19   1211/19 1621   1818	Benzo(a)pyrene	2.0	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bestack/\thiusanshane	Benzo(b)fluoranthene	2.4	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Birl	Benzo(g,h,i)perylene	0.82	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bid2-chloroentyl)Peter   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Bid2-chloroengey)Peter   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Remospheny)behalter   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Remospheny)behalter   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Remospheny)behalter   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Chlorosaniline   ND   0.77   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Chlorosaniline   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Chlorosaniline   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Chlorosaniline   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Chlorosaniline   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   A-Chlorosaniline   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND   0.40   ng/Kg dry   1   SW-466 8270D-E   12/11/9   12/11/9 1631   MR   Dibezac/Juntancene   ND	Benzo(k)fluoranthene	0.90	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bir	Bis(2-chloroethoxy)methane	ND	0.40	mg/Kg dry	l		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Bis   C-Edythexylphishalare   ND   0.40   ng/Kg dry   1   SW-846 \$270D-E   12/11/9   12/12/19   16.51   MR	Bis(2-chloroethyl)ether	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
4-Bromophenylphenylether         ND         0.40         mg/Kg dry         1         SW-446 8270D-E         1211/19         121/19 16-15         MR           3-uylberuzylphthalate         ND         0.40         mg/Kg dry         1         SW-346 8270D-E         1211/19         121/19 16-15         MR           4-Chloronaliñie         ND         0.77         mg/Kg dry         1         SW-346 8270D-E         1211/19         121/19 16-15         MR           2-Chloronphenol         ND         0.40         mg/Kg dry         1         SW-346 8270D-E         1211/19         121/19 16-15         MR           2-Chloronphenol         2.1         0.20         mg/Kg dry         1         SW-346 8270D-E         1211/19         121/19 16-15         MR           1-DibenzaChran         0.21         0.20         mg/Kg dry         1         SW-346 8270D-E         1211/19         121/19 16-15         MR           DibenzaChran         ND         0.40         mg/Kg dry         1         SW-346 8270D-E         1211/19         121/19 16-15         MR           1,2-Dichlorobenzene         ND         0.40         mg/Kg dry         1         SW-346 8270D-E         1211/19         121/19 16-15         MR           1,3-Dichlorobenzene	Bis(2-chloroisopropyl)ether	ND	0.40	mg/Kg dry	ı		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Purple purple plantalate	Bis(2-Ethylhexyl)phthalate	ND	0.40	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
4-Ckloroaniline         ND         0.77         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16.51         MR           2-Ckloroanphthalene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16.51         MR           2-Chlorophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16.51         MR           Chrysene         2.1         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16.51         MR           Dieneu(s,h)antracene         0.21         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16.51         MR           Dieneu(s)phthalate         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16.51         MR           1,3-Dichlorobenzace         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16.51         MR           1,4-Dichlorobenzace         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16.51         MR           1,4-Dic	4-Bromophenylphenylether	ND	0.40	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2-Chloronaphthalene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 12/10-10-10-10-10-10-10-10-10-10-10-10-10-1	Butylbenzylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2-Chlorophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR	4-Chloroaniline	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Chrysene         2.1         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/9         12/12/19 16:51         MR           Dibenz(a,h)anthracene         0.21         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/9         12/12/19 16:51         MR           Dibenz(a,h)anthracene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/9         12/12/19 16:51         MR           Di-n-butylpthalate         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/9         12/12/19 16:51         MR           1,3-Dichlorobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/9         12/12/19 16:51         MR           1,4-Dichlorobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/9         12/12/19 16:51         MR           1,4-Dichlorobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/9         12/12/19 16:51         MR           2,4-Dichlorobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/9         12/12/19 16:51         MR           2,4-	2-Chloronaphthalene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Dibenz(a,h)suthracene   0.21   0.20   mg/Kg dry   1   SW-846 8270D-E   121/119   121/119   1631   171   171/119   1631   171   171/119   1631   171   171/119   171/	2-Chłorophenoi	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Dienzofuran   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     Di-n-butylphthalate   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     1,3-Dichlorobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     1,4-Dichlorobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     1,4-Dichlorobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dichlorobenzidine   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dichlorobenzidine   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimethylphthalate   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimethylphthalate   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     2,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     1,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     1,4-Dimitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/9   12/12/19 16:51   MR     1,4-Dimitropheno	Chrysene	2.1	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Di-n-butylphthalate ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Dichlorobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,3-Dichlorobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,3-Dichlorobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,4-Dichlorobenzend ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg	Dibenz(a,h)anthracene	0.21	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1.2-Dichlorobenzene   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     1.3-Dichlorobenzene   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     1.4-Dichlorobenzene   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorobenzidine   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR     2.4-Dichlorophenol   ND   0.40   ng/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR	Dibenzofuran	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1,3-Dichlorobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         MR           1,4-Dichlorobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         MR           3,3-Dichlorobenzidine         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         MR           2,4-Dichlorophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         MR           2,4-Dichlorophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         MR           2,4-Dimethylphenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/11/19 16:51         MR           2,4-Dinitrophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/11/19 16:51         MR           2,4-Dinitrophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/11/19 16:51         MR	Di-n-butylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1.4-Dichlorobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           3,3-Dichlorobenzidine         ND         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,4-Dichlorophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,4-Dinethylphthalate         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,4-Dinethylphthalate         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,4-Dinitrophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,4-Dinitrophenol         ND         0.77         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,4-Dinitrophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR      <	1,2-Dichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
3,3-Dichlorobenzidine ND 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dichlorophenol ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dichlorophenol ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dimethylphenol ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dimethylphenol ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dimitrophenol ND 0.77 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dimitrophenol ND 0.77 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dimitrophenol ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dimitrophenol ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,4-Dimitrophenol ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 MR 2,1	1,3-Dichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4-Dichlorophenol ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Dichtylphthalate ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 2,4-Dimethylphenol ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Dimethylphthalate ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 2,4-Dinitrophenol ND 0,77 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 2,4-Dinitrophenol ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 2,4-Dinitrotoluene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 2,6-Dinitrotoluene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Di-n-octylphthalate ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0,40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/11/19 12/11/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0	1,4-Dichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Diethylphthalate         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         MR           2,4-Dimethylphenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         MR           Dimethylphthalate         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         MR           2,4-Dinitrophenol         ND         0.77         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,4-Dinitrophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,4-Dinitrophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           2,6-Dinitrophenol         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           1,2-Diphenylhydrazine/Azobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR	3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4-Dimethylphenol       ND       0,40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       MR         Dimethylphthalate       ND       0,40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         2,4-Dinitrophenol       ND       0,77       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         2,4-Dinitrotoluene       ND       0,40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         2,6-Dinitrotoluene       ND       0,40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Di-n-octylphthalate       ND       0,40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         1,2-Diphenylhydrazine/Azobenzene       ND       0,40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Fluorene       ND       0,40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachlorobutadiene       ND       0,40       mg/Kg dry       1       SW-846 827	2,4-Dichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Dimethylphthalate   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   2,4-Dinitrophenol   ND   0.77   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   2,4-Dinitrophenol   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   2,6-Dinitrotoluene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.20   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/Kg dry   1   SW-846 8270D-E   12/11/19   12/12/19 16:51   IMR   1,2-Diphenylhydrazine/Azobenzene   ND   0.40   mg/K	Diethylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4-Dinitrophenol       ND       0.77       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         2,4-Dinitrotoluene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         2,6-Dinitrotoluene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Di-n-octylphthalate       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         1,2-Diphenylhydrazine/Azobenzene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Fluoranthene       4.4       0.20       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachlorobenzene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Jexachlorobutadiene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachloroethane       ND       0.40       mg/Kg dry       1       SW-846	2,4-Dimethylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4-Dinitrotoluene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         2,6-Dinitrotoluene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Di-n-octylphthalate       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         1,2-Diphenylhydrazine/Azobenzene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Fluoranthene       4.4       0.20       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachlorobenzene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         I Lexachlorobutadiene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachloroethane       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Indeno(1,2,3-cd)pyrene       1.1       0.20       mg/Kg dry       1 <t< td=""><td>Dimethylphthalate</td><td>ND</td><td>0.40</td><td>mg/Kg dry</td><td>1</td><td></td><td>SW-846 8270D-E</td><td>12/11/19</td><td>12/12/19 16:51</td><td>IMR</td></t<>	Dimethylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,6-Dinitrotoluene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Di-n-octylphthalate       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         1,2-Diphenylhydrazine/Azobenzene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Fluoranthene       4.4       0.20       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Fluorene       ND       0.20       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachlorobenzene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachlorobutadiene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachloroethane       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Indeno(1,2,3-ed)pyrene       1.1       0.20       mg/Kg dry       1       SW-846 827	2,4-Dinitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Di-n-octylphthalate ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR 1,2-Diphenylhydrazine/Azobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Fluoranthene 4.4 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Fluorene ND 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Hexachlorobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR lexachlorobutadiene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Hexachlorobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Hexachloroethane ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Indeno(1,2,3-ed)pyrene 1.1 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR	2,4-Dinitrotoluene	ND	0.40	mg/Kg dry	l		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1,2-Diphenylhydrazine/Azobenzene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Fluoranthene       4.4       0.20       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Fluorene       ND       0.20       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachlorobenzene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachlorobutadiene       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Hexachloroethane       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Indeno(1,2,3-ed)pyrene       1.1       0.20       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR         Isophorone       ND       0.40       mg/Kg dry       1       SW-846 8270D-E       12/11/19       12/12/19 16:51       IMR	2,6-Dinitrotoluene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Fluoranthene 4.4 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Fluorene ND 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Hexachlorobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Lexachlorobutadiene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Hexachloroethane ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Indeno(1,2,3-cd)pyrene 1.1 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Indeno(1,0,3-cd)pyrene 1.1 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Isophorone ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR	Di-n-octylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Fluorene ND 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Hexachlorobenzene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR lexachlorobtuadiene ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Hexachloroethane ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Indeno(1,2,3-cd)pyrene 1.1 0.20 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR Isophorone ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR	1,2-Diphenylhydrazine/Azobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Hexachlorobenzene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Jexachlorobutadiene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Hexachloroethane         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Indeno(1,2,3-ed)pyrene         1.1         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Isophorone         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR	Fluoranthene	4.4	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Jexachlorobutadiene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Hexachlorobutadiene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Indeno(1,2,3-ed)pyrene         1.1         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Isophorone         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR	Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Jexachlorobutadiene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Hexachlorobutadiene         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Indeno(1,2,3-ed)pyrene         1.1         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Isophorone         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR	Hexachlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Indeno(1,2,3-ed)pyrene         1.1         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Isophorone         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR	Iexachlorobutadiene	ND	0.40		1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Indeno(1,2,3-ed)pyrene         1.1         0.20         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR           Isophorone         ND         0.40         mg/Kg dry         1         SW-846 8270D-E         12/11/19         12/12/19 16:51         IMR	Hexachloroethane	ND	0.40	mg/Kg dry	i		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Isophorone ND 0.40 mg/Kg dry 1 SW-846 8270D-E 12/11/19 12/12/19 16:51 IMR	Indeno(1,2,3-cd)pyrene						SW-846 8270D-E	12/11/19	12/12/19 16:51	
• • • • • • • • • • • • • • • • • • • •								12/11/19	12/12/19 16:51	
	2-Methylnaphthalene						SW-846 8270D-E	12/11/19		IMR
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Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-5 (3-5')

Sampled: 12/9/2019 14:15

Sample ID: 19L0396-02
Sample Matrix: Soil

		Semi	volatile Organic Co	mpounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
3/4-Methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Nitrobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2-Nitrophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
4-Nitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Pentachlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Phenanthrene	1.7	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Phenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Ругепе	3.5	0.20	mg/Kg dry	I	V-05	SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
1,2,4-Trichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4,5-Trichlorophenol	ND	0.40	mg/Kg dry	ı		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
2,4,6-Trichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 16:51	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual	-			
2-Fluorophenol		53.7	30-130					12/12/19 16:51	
Phenol-d6		57.3	30-130					12/12/19 16:51	
Nitrobenzene-d5		49.7	30-130					12/12/19 16:51	
2-Fluorobiphenyl		67.6	30-130					12/12/19 16:51	
2,4,6-Tribromophenol		62.5	30-130					12/12/19 16:51	
p-Terphenyl-d14		60.3	30-130					12/12/19 16:51	



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019 Field Sample #: GP 3-5 (3-5')

Sampled: 12/9/2019 14:15

Sample ID: 19L0396-02 Sample Matrix: Soil

			Metals Analy	/ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:07	МЈН
Arsenic	19	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Barium	280	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Beryllium	0.42	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Cadmium	1.1	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Chromium	18	0.40	mg/Kg dry	I		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Lead	1100	0.60	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Mercury	2.5	0.15	mg/Kg dry	5		SW-846 7471B	12/11/19	12/12/19 12:48	CJV
Nickel	11	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Selenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Silver	0.70	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:07	МЈН
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Vanadium	29	0.80	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC
Zinc	540	0.80	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:01	TBC



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-5 (3-5')

Sampled: 12/9/2019 14:15

Sample ID: 19L0396-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		83.8		% Wt	1		SM 2540G	12/11/19	12/11/19 15:03	adb



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019 Field Sample #: GP 3-6 (2-4')

Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03 Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Acetophenone	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Aniline	ND	0.39	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Bis(2-chloroethoxy)methane	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Bis(2-chloroethyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Bis(2-chloroisopropyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Bis(2-Ethylhexyl)phthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
4-Bromophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Butylbenzylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
4-Chloroaniline	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2-Chloronaphthalene	ND	0.39	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2-Chlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Dibenzofuran	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Di-n-butylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,2-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,3-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,4-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4-Dichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Diethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4-Dimethylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Dimethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4-Dinitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,6-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Di-n-octylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,2-Diphenylhydrazine/Azobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Hexachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Hexachlorobutadiene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Hexachloroethane	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Isophorone	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR

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Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4')

Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03
Sample Matrix: Soil

Sample Matrix. 300		Semi	volatile Organic Co	mpounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0,39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
3/4-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Nitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2-Nitrophenol	ND	0.39	mg/Kg dry	i		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
4-Nitrophenol	ND	0.77	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Pentachiorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Phenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Pyrene	ND	0.20	mg/Kg dry	1	V-05	SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg dry	i		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4,5-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
2,4,6-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/12/19 17:16	IMR
Surrogates		% Recovery	Recovery Limits	:	Flag/Qual				
2-Fluorophenol		64.1	30-130					12/12/19 17:16	
Phenol-d6		65.6	30-130					12/12/19 17:16	
Nitrobenzene-d5		57.5	30-130					12/12/19 17:16	
2-Fluorobiphenyl		80.3	30-130					12/12/19 17:16	
2,4,6-Tribromophenol		71.6	30-130					12/12/19 17:16	
p-Terphenyl-d14		68.9	30-130					12/12/19 17:16	



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

ND

ND

0.11

0.11

Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4')

Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03 Sample Matrix: Soil

Pyrene

2-Methylnaphthalene Naphthalene Phenanthrene

			Petroleum Hydrocarl	ons Analyses	- EPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
C19-C36 Aliphatics	120	11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Unadjusted C11-C22 Aromatics	52	11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
C11-C22 Aromatics	52	11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	I		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Chrysene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Fluorene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Indeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	12/12/19	12/16/19 12:31	RMW

MADEP-EPH-04-1.1

MADEP-EPH-04-1.1

12/12/19

12/12/19

12/16/19 12:31

12/16/19 12:31

RMW

RMW

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	82.3	40-140		12/16/19 12:31
o-Terphenyl (OTP)	80.3	40-140		12/16/19 12:31
2-Bromonaphthalene	96.4	40-140		12/16/19 12:31
2-Fluorobiphenyl	101	40-140		12/16/19 12:31

1

1

mg/Kg dry

mg/Kg dry



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4')

Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03
Sample Matrix: Soil

			Metals Analy	/ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:13	МЈН
Arsenic	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Barium	12	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Beryllium	ND	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Cadmium	ND	0.20	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Chromium	4.4	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Lead	8.0	0.60	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Mercury	ND	0.029	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 11:50	CJV
Nickel	3.7	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Sclenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Silver	ND	0.40	mg/Kg dry	1		SW-846 6010D	12/12/19	12/16/19 13:13	МЈН
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Vanadium	7.8	0.80	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC
Zinc	12	0.80	mg/Kg dry	1		SW-846 6010D	12/12/19	12/13/19 20:07	TBC



Project Location: 225-227 Beaver St, Waltham, MA

Sample Description:

Work Order: 19L0396

Date Received: 12/10/2019

Field Sample #: GP 3-6 (2-4')

Sampled: 12/9/2019 15:00

Sample ID: 19L0396-03
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		84.3		% Wt	1		SM 2540G	12/11/19	12/11/19 15:03	adb



# Sample Extraction Data

Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19L0396-03 [GP 3-6 (2-4')]	B248185	20.7	2.00	12/12/19

# Prep Method: % Solids-SM 2540G

Lab Number (Field ID)	Batch	Date
19L0396-01 [GP 3-4 (3-5')]	B248096	12/11/19
19L0396-02 [GP 3-5 (3-5')]	B248096	12/11/19
19L0396-03 [GP 3-6 (2-4')]	B248096	12/11/19

# Prep Method: SW-846 3050B-SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19L0396-01 [GP 3-4 (3-5')]	B248270	1.48	50.0	12/12/19	
19L0396-02 [GP 3-5 (3-5')]	B248270	1.50	50.0	12/12/19	
19L0396-03 [GP 3-6 (2-4')]	B248270	1.49	50.0	12/12/19	

## Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
'9L0396-01 [GP 3-4 (3-5')]	B248100	0.594	50.0	12/11/19
L0396-02 [GP 3-5 (3-5')]	B248100	0.590	50.0	12/11/19
19L0396-03 [GP 3-6 (2-4')]	B248100	0.616	50.0	12/11/19

# Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19L0396-01 [GP 3-4 (3-5')]	B248158	30.6	1.00	12/11/19	
19L0396-02 [GP 3-5 (3-5')]	B248158	30.8	1.00	12/11/19	
19L0396-03 [GP 3-6 (2-4')]	B248158	30.7	1.00	12/11/19	



### QUALITY CONTROL

\nalyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
atch B248158 - SW-846 3546										
lank (B248158-BLK1)				Prepared: 12	2/11/19 Anal	yzed: 12/12/1	9			
cenaphthene	ND	0.17	mg/Kg wet							
cenaphthylene	ND	0.17	mg/Kg wet							
cetophenone	ND	0.34	mg/Kg wet							
niline	ND	0.34	mg/Kg wet							
nthracene	ND	0.17	mg/Kg wet							
enzo(a)anthracene	ND	0.17	mg/Kg wet							
enzo(a)pyrene	ND	0.17	mg/Kg wet							
enzo(b)fluoranthene	ND	0.17	mg/Kg wet							
enzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
enzo(k)fluoranthene	ND	0.17	mg/Kg wet							
is(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
is(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
is(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
is(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
Bromophenylphenylether	ND	0.34	mg/Kg wet							
utylbenzylphthalate	ND	0.34	mg/Kg wet							
Chloroaniline	ND	0.65	mg/Kg wet							
Chloronaphthalene	ND	0.34	mg/Kg wet							
Chlorophenol	ND	0.34	mg/Kg wet							
rysene	ND	0.17	mg/Kg wet							
ibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
ibenzofuran	ND	0.34	mg/Kg wet							
i-n-butylphthalate	ND	0.34	mg/Kg wet							
2-Dichlorobenzene	ND	0.34	mg/Kg wet							
3-Dichlorobenzene	ND	0.34	mg/Kg wet							
4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
4-Dichlorophenol	ND	0.34	mg/Kg wet							
iethylphthalate	ND	0.34	mg/Kg wet							
4-Dimethylphenol	ND	0.34	mg/Kg wet							
imethylphthalate	ND	0.34	mg/Kg wet							
4-Dinitrophenol	ND	0.65	mg/Kg wet							
4-Dinitrotoluene	ND ND	0.34	mg/Kg wet							
6-Dinitrotoluene		0.34	mg/Kg wet							
-n-octylphthalate	ND	0.34	mg/Kg wet							
-n-octyphthalate 2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
uoranthene	ND	0.17	mg/Kg wet							
uorene	ND	0.17	mg/Kg wet							
uorene exachlorobenzene	ND	0.17	mg/Kg wet							
exachlorobutadiene	ND	0.34	mg/Kg wet							
exachtoroputatione exachtoroethane	ND		mg/Kg wet mg/Kg wet							
exacnioroetnane deno(1,2,3-cd)pyrene	ND	0.34								
,	ND	0.17	mg/Kg wet							
ophorone Methylpaphthalana	ND	0.34	mg/Kg wet							
Methylnaphthalene	ND	0.17	mg/Kg wet							
Methylphenol	ND	0.34	mg/Kg wet							
4-Methylphenol	ND	0.34	mg/Kg wet							
phthalene	ND	0.17	mg/Kg wet							
robenzene	ND	0.34	mg/Kg wet							
Nitrophenol	ND	0.34	mg/Kg wet							
Nitrophenol	ND	0.65	mg/Kg wet							
ntachlorophenol	ND	0.34	mg/Kg wet							



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248158 - SW-846 3546										
Blank (B248158-BLK1)				Prepared: 12	2/11/19 Analy	/zed: 12/12/1	9			
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							V-05
Pyridine	ND	0.34	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	5.18		mg/Kg wet	6.60		78.5	30-130			
Surrogate: Phenol-d6	5.21		mg/Kg wet	6.60		79.0	30-130			
Surrogate: Nitrobenzene-d5	2.38		mg/Kg wet	3.30		72.2	30-130			
Surrogate: 2-Fluorobiphenyl	2.99		mg/Kg wet	3.30		90.6	30-130			
Surrogate: 2,4,6-Tribromophenol	4.45		mg/Kg wet	6.60		67.4	30-130			
urrogate: p-Terphenyl-d14	2.40		mg/Kg wet	3.30		72.8	30-130			
LCS (B248158-BS1)				Prepared: 12	./11/19 Analy	zed: 12/12/1	9			
Acenaphthene	1.18	0.17	mg/Kg wet	1.63		72.6	40-140			
Acenaphthylene	1.24	0.17	mg/Kg wet	1.63		76.2	40-140			
Acetophenone	1.19	0.33	mg/Kg wet	1.63		73.1	40-140			
niline	0.814	0.33	mg/Kg wet	1.63		50.0	40-140			
nthracene	1.29	0.17	mg/Kg wet	1.63		79.1	40-140			
.nzo(a)anthracene	1.28	0.17	mg/Kg wet	1.63		78.7	40-140			
enzo(a)pyrene	1.20	0.17	mg/Kg wet	1.63		73.9	40-140			
enzo(b)fluoranthene	1.21	0.17	mg/Kg wet	1.63		74.2	40-140			
enzo(g,h,i)perylene	1.20	0.17	mg/Kg wet	1.63		73.9	40-140			
enzo(k)fluoranthene	1.24	0.17	mg/Kg wet	1.63		75.9	40-140			
is(2-chloroethoxy)methane	1.24	0.33	mg/Kg wet	1.63		75.9	40-140			
is(2-chloroethyl)ether	1.16	0.33	mg/Kg wet	1.63		71.5	40-140			
is(2-chloroisopropyl)ether	1.33	0.33	mg/Kg wet	1.63		81.8	40-140			
is(2-Ethylhexyl)phthalate	1.27	0.33	mg/Kg wet	1.63		78.2	40-140			
-Bromophenylphenylether	1.30	0.33	mg/Kg wet	1.63		79.5	40-140			
utylbenzylphthalate	1.31	0.33	mg/Kg wet	1.63		80.6	40-140			
-Chloroaniline	0.991	0.64	mg/Kg wet	1.63		60.8	15-140			
-Chloronaphthalene	1.05	0.33	mg/Kg wet	1.63		64.3	40-140			
-Chlorophenol	1.17	0.33	mg/Kg wet	1.63		72.1	30-130			
hrysene	1.21	0.17	mg/Kg wet	1.63		74.2	40-140			
Pibenz(a,h)anthracene	1.15	0.17	mg/Kg wet	1.63		70.5	40-140			
ibenzofuran	1.28	0.33	mg/Kg wet	1.63		78.3	40-140			
i-n-butylphthalate	1.24	0.33	mg/Kg wet	1.63		76.3	40-140			
2-Dichlorobenzene	1.07	0.33	mg/Kg wet	1.63		65.6	40-140			
3-Dichlorobenzene	1.06	0.33	mg/Kg wet	1.63		64.9	40-140			
4-Dichlorobenzene	1.07	0.33	mg/Kg wet	1.63		65.7	40-140			
3-Dichlorobenzidine	1.07	0.17	mg/Kg wet	1.63		66.0	40-140			
4-Dichlorophenol	1.25	0.33	mg/Kg wet	1.63		76.7	30-130			
iethylphthalate	1.23	0.33	mg/Kg wet	1.63		75.3	40-140			
4-Dimethylphenol	1.26	0.33	mg/Kg wet	1.63		77.4	30-130			
imethylphthalate	1.26	0.33	mg/Kg wet	1.63		77.3	40-140			
4-Dinitrophenol	0.420	0.64	mg/Kg wet	1.63		25.8	15-140			
4-Dinitrotoluene	1.22	0.33	mg/Kg wet	1.63		74.8	40-140			
Dinitrotoluene	1.33	0.33	mg/Kg wet	1.63		82.0	40-140			
i-n-octylphthalate	1.31	0.33	mg/Kg wet	1.63		80.3	40-140			
2-Diphenylhydrazine/Azobenzene	1.27	0.33	mg/Kg wet	1.63		77.8	40-140			
uoranthene	1.23	0.17	mg/Kg wet	1.63		75.8	40-140			
uorene	1.23	0.17	mg/Kg wet	1.63		75.7	40-140			



Analyte	Dte	Reporting	I forite	Spike	Source	0/ DFC	%REC	ממח	RPD	NI-+ -	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch B248158 - SW-846 3546  LCS (B248158-BS1)			·	Prangrad, 13	/11/19 Analy	rad: 12/12/	10				
Hexachlorobenzene	1.07	0.33	mg/Kg wet	1.63	/11/19 Allaly	77.9	40-140				_
Hexachlorobutadiene	1.27 1.10	0.33	mg/Kg wet	1.63		67.7	40-140				
Hexachloroethane	1.10	0.33	mg/Kg wet	1.63		65.1	40-140				
Indeno(1,2,3-cd)pyrene	1.06	0.17	mg/Kg wet	1.63		76.5	40-140				
Sophorone	1.23	0.33	mg/Kg wet	1.63		75.8	40-140				
2-Methylnaphthalene	1.32	0.17	mg/Kg wet	1.63		80.9	40-140				
2-Methylphenol	1.15	0.33	mg/Kg wet	1.63		70.8	30-130				
3/4-Methylphenol	1.23	0.33	mg/Kg wet	1.63		75.6	30-130				
Vaphthalene	1.17	0.17	mg/Kg wet	1.63		71.7	40-140				
Vitrobenzene	1.12	0.33	mg/Kg wet	1.63		68.7	40-140				
2-Nitrophenol	1.18	0.33	mg/Kg wet	1.63		72.6	30-130				
l-Nitrophenol	1.11	0.64	mg/Kg wet	1.63		68.4	15-140				t
Pentachlorophenol	0.955	0.33	mg/Kg wet	1.63		58.6	30-130				'
Phenanthrene	1.29	0.17	mg/Kg wet	1.63		79.4	40-140				
Phenol	1.17	0.33	mg/Kg wet	1.63		71.5	15-140				†
Pyrene	1.17	0.17	mg/Kg wet	1.63		72.3	40-140			V-05	- 1
Pyridine	0.716	0.33	mg/Kg wet	1.63		43.9	30-140			*-05	†
,2,4-Trichlorobenzene	1.14	0.33	mg/Kg wet	1.63		70.2	40-140				'
,5-Trichlorophenol	1.25	0.33	mg/Kg wet	1.63		76.6	30-130				
,4,6-Trichlorophenol	1.25	0.33	mg/Kg wet	1.63		77.0	30-130				
Surrogate: 2-Fluorophenol										*******	
•	5.08		mg/Kg wet	6.51		78.0	30-130				
urrogate: Phenol-d6 urrogate: Nitrobenzene-d5	5.04		mg/Kg wet	6.51		77.4	30-130				
urrogate: Nitrobenzene-u3 urrogate: 2-Fluorobiphenyl	2.44 3.11		mg/Kg wet	3.26		74.9	30-130 30-130				
urrogate: 2,4,6-Tribromophenol	5.37		mg/Kg wet	3.26 6.51		95.4 82.4	30-130				
urrogate: p-Terphenyl-d14	2.63		mg/Kg wet mg/Kg wet	3.26		80.8	30-130				
LCS Dup (B248158-BSD1)					/11/19 Analy:	zed: 12/12/1					
Acenaphthene	1.18	0.17	mg/Kg wet	1.66		71.6	40-140	0.144	30		
Acenaphthylene	1.25	0.17	mg/Kg wet	1.66		75.7	40-140	0.878	30		
Acetophenone	1.23	0.34	mg/Kg wet	1.66		74.5	40-140	3.59	30		
Aniline	0.841	0.34	mg/Kg wet	1.66		50.8	40-140	3.35	30		
Anthracene	1.30	0.17	mg/Kg wet	1.66		78.3	40-140	0.574	30		
lenzo(a)anthracene	1.31	0.17	mg/Kg wet	1.66		78.9	40-140	1.87	30		
Benzo(a)pyrene	1.25	0.17	mg/Kg wet	1.66		75.6	40-140	3.89	30		
enzo(b)fluoranthene	1.26	0.17	mg/Kg wet	1.66		76.1	40-140	4.12	30		
enzo(g,h,i)perylene	1.19	0.17	mg/Kg wet	1.66		71.7	40-140	1.46	30		
enzo(k)fluoranthene	1.30	0.17	mg/Kg wet	1.66		78.6	40-140	5.14	30		
is(2-chloroethoxy)methane	1.30	0.34	mg/Kg wet	1.66		78.8	40-140	5.31	30		
is(2-chloroethyl)ether	1.22	0.34	mg/Kg wet	1.66		73.8	40-140	4.92	30		
is(2-chloroisopropyl)ether	1.39	0.34	mg/Kg wet	1.66		83.8	40-140	4.03	30		
is(2-Ethylhexyl)phthalate	1.37	0.34	mg/Kg wet	1.66		82.6	40-140	7.14	30		
-Bromophenylphenylether	1.28	0.34	mg/Kg wet	1.66		77.0	40-140	1.55	30		
utylbenzylphthalate	1.29	0.34	mg/Kg wet	1.66		77.8	40-140	1.97	30		
Chloroaniline	1.04	0.66	mg/Kg wet	1.66		62.7	15-140	4.59	30		†
Chloronaphthalene	1.04	0.34	mg/Kg wet	1.66		65.6	40-140	3.55	30		'
Chlorophenol	1.09	0.34	mg/Kg wet	1.66		74.6	30-130	4.97	30		
ysene		0.17	mg/Kg wet	1.66		78.7	40-140	7.52	30		
ibenz(a,h)anthracene	1.30 1.16	0.17	mg/Kg wet	1.66		70.1	40-140	0.959	30		
ibenzofuran		0.17	mg/Kg wet	1.66		78.1	40-140	1.36	30		
i-n-butylphthalate	1.29	0.34	mg/Kg wet	1.66		78.1 78.4	40-140	4.36	30		
,2-Dichlorobenzene	1.30	0.34	mg/Kg wet					4.36 4.94	30		
a a londo o o o o o o o o o o o o o o o o o o	1.12	0.54	mg/rg wer	1.66		67.8	40-140	7.74	JU		



# QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B248158 - SW-846 3546											
LCS Dup (B248158-BSD1)				Prepared: 12	/11/19 Analy	yzed: 12/12/1	.9				
1,3-Dichlorobenzene	1.09	0.34	mg/Kg wet	1.66		65.7	40-140	2.87	30		
1,4-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.66		67.3	40-140	4.08	30		
3,3-Dichlorobenzidine	1.05	0.17	mg/Kg wet	1.66		63.7	40-140	1.88	30		
2,4-Dichlorophenol	1.28	0.34	mg/Kg wet	1.66		77.2	30-130	2.29	30		
Diethylphthalate	1.25	0.34	mg/Kg wet	1.66		75.4	40-140	1.83	30		
2,4-Dimethylphenol	1.30	0.34	mg/Kg wet	1.66		78.6	30-130	3.18	30		
Dimethylphthalate	1.25	0.34	mg/Kg wet	1.66		75.3	40-140	0.980	30		
2,4-Dinitrophenol	0.430	0.66	mg/Kg wet	1.66		26.0	15-140	2.41	30		t
2,4-Dinitrotoluene	1.29	0.34	mg/Kg wet	1.66		77.8	40-140	5.52	30		
2,6-Dinitrotoluene	1.32	0.34	mg/Kg wet	1.66		79.9	40-140	0.853	30		
Di-n-octylphthalate	1.40	0.34	mg/Kg wet	1.66		84.6	40-140	6.88	30		
1,2-Diphenylhydrazine/Azobenzene	1.30	0.34	mg/Kg wet	1.66		78.6	40-140	2.72	30		
Fluoranthene	1.30	0.17	mg/Kg wet	1.66		78.3	40-140	4.86	30		
Fluorene	1.28	0.17	mg/Kg wet	1.66		77.6	40-140	4.07	30		
Hexachlorobenzene	1.26	0.34	mg/Kg wet	1.66		76.0	40-140	0.854	30		
Hexachlorobutadiene	1.16	0.34	mg/Kg wet	1.66		70.1	40-140	5.10	30		
Hexachloroethane	1.09	0.34	mg/Kg wet	1.66		66.0	40-140	2.95	30		
Indeno(1,2,3-cd)pyrene	1.25	0.17	mg/Kg wet	1.66		75.6	40-140	0.406	30		
phorone	1.32	0.34	mg/Kg wet	1.66		79.4	40-140	6.30	30		
Methylnaphthalene	1.41	0.17	mg/Kg wet	1.66		85.0	40-140	6.56	30		
2-Methylphenol	1.23	0.34	mg/Kg wet	1.66		74.3	30-130	6.44	30		
3/4-Methylphenol	1.29	0.34	mg/Kg wet	1.66		77.9	30-130	4.74	30		
Naphthalene	1.23	0.17	mg/Kg wet	1.66		74.3	40-140	5.15	30		
Nitrobenzene	1.22	0.34	mg/Kg wet	1.66		73.7	40-140	8.72	30		
2-Nitrophenol	1.26	0.34	mg/Kg wet	1.66		76.4	30-130	6.77	30		
4-Nitrophenol	1.18	0.66	mg/Kg wet	1.66		71.4	15-140	5.88	30		t
Pentachlorophenol	0.962	0.34	mg/Kg wet	1.66		58.1	30-130	0.751	30		
Phenanthrene	1.31	0.17	mg/Kg wet	1.66		79.4	40-140	1.67	30		
Phenol	1.21	0.34	mg/Kg wet	1.66		73.0	15-140	3.66	30		t
Pyrene	1.19	0.17	mg/Kg wet	1.66		71.8	40-140	0.976	30	V-05	
Pyridine	0.733	0.34	mg/Kg wet	1.66		44.3	30-140	2.46	30		†
1,2,4-Trichlorobenzene	1.20	0.34	mg/Kg wet	1.66		72.8	40-140	5.17	30		
2,4,5-Trichlorophenol	1.28	0.34	mg/Kg wet	1.66		77.2	30-130	2.37	30		
2,4,6-Trichlorophenol	1.21	0.34	mg/Kg wet	1.66		73.3	30-130	3.26	30		
Surrogate: 2-Fluorophenol	5.17		mg/Kg wet	6.62		78.0	30-130				
Surrogate: Phenol-d6	5.20		mg/Kg wet	6.62		78.5	30-130				
Surrogate: Nitrobenzene-d5	2.52		mg/Kg wet	3.31		76.1	30-130				
Surrogate: 2-Fluorobiphenyl	2.98		mg/Kg wet	3.31		90.0	30-130				
Surrogate: 2,4,6-Tribromophenol	5.40		mg/Kg wet	6.62		81.5	30-130				
Surrogate: p-Terphenyl-d14	2.59		mg/Kg wet	3.31		78.1	30-130				



# Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248185 - SW-846 3546										
Blank (B248185-BLK1)				Prepared: 12	/12/19 Analy	zed: 12/15/1	9			
C9-C18 Aliphatics	ND	10	mg/Kg wet		<u>-</u>					P. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet							
Acenaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.10	mg/Kg wet							
Fluoranthene	ND	0.10	mg/Kg wet							
Fluorene	ND	0.10	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg wet							
2-Methylnaphthalene	ND	0.10	mg/Kg wet mg/Kg wet							
Naphthalene Phenanthrene	ND	0.10								
rene	ND	0.10 0.10	mg/Kg wet mg/Kg wet							
n-Decane	ND	0.50	mg/Kg wet							
n-Docosane	ND	0.50	mg/Kg wet							
n-Dodecane	ND ND	0.50	mg/Kg wet							
a-Eicosane	ND ND	0.50	mg/Kg wet							
1-Hexacosane	ND	0.50	mg/Kg wet							
n-Hexadecane	ND	0.50	mg/Kg wet							
n-Hexatriacontane	ND	0.50	mg/Kg wet							
n-Nonadecane	ND	0.50	mg/Kg wet							
n-Nonane	ND	0.50	mg/Kg wet							
n-Octacosane	ND	0.50	mg/Kg wet							
n-Octadecane	ND	0.50	mg/Kg wet							
n-Tetracosane	ND	0.50	mg/Kg wet							
n-Tetradecane	ND	0.50	mg/Kg wet							
n-Triacontane	ND	0.50	mg/Kg wet							
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Surrogate: Chlorooctadecane (COD)	3.76		mg/Kg wet	5.00		75.1	40-140			
Surrogate: o-Terphenyl (OTP)	3.88		mg/Kg wet	5.00		77.6	40-140			
Surrogate: 2-Bromonaphthalene	4.74		mg/Kg wet	5.00		94.8	40-140			
Surrogate: 2-Fluorobiphenyl	4.81		mg/Kg wet	5.00		96.2	40-140			
CCS (B248185-BS1)	Parties Carried				/12/19 Analy					
C9-C18 Aliphatics	19.2	10	mg/Kg wet	30.0		63.9	40-140			
C19-C36 Aliphatics	36.0	10	mg/Kg wet	40.0		89.9	40-140			
Jnadjusted C11-C22 Aromatics	67.2	10	mg/Kg wet	85.0		79.0	40-140			
Acenaphthene	3.51	0.10	mg/Kg wet	5.00		70.3	40-140			
cenaphthylene	3.23	0.10	mg/Kg wet	5.00		64.7	40-140			
nthracene	3.73	0.10	mg/Kg wet	5.00		74.7	40-140			
_inzo(a)anthracene	3.81	0.10	mg/Kg wet	5.00		76.1	40-140			
Benzo(a)pyrene	3.61	0.10	mg/Kg wet	5.00		72.2	40-140			
Benzo(b)fluoranthene	3.71	0.10	mg/Kg wet	5.00		74.1	40-140			



# Petroleum Hydrocarbons Analyses - EPH - Quality Control

Applyto	D14	Reporting	T Imia-	Spike	Source	0/DEC	%REC	מתם	RPD Limit	Not
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B248185 - SW-846 3546										
LCS (B248185-BS1)					/12/19 Analy					
Benzo(g,h,i)perylene	3.54	0.10	mg/Kg wet	5.00		70.7	40-140			
Benzo(k)fluoranthene	3.65	0.10	mg/Kg wet	5.00		73.0	40-140			
Chrysene Dibary(a b)anthrogene	3.87	0.10	mg/Kg wet	5.00		77.5	40-140			
Dibenz(a,h)anthracene Fluoranthene	3.66	0.10 0.10	mg/Kg wet mg/Kg wet	5.00 5.00		73.2 76.7	40-140 40-140			
Fluorene	3.84	0.10	mg/Kg wet			73.0	40-140			
Indeno(1,2,3-cd)pyrene	3.65 3.46	0.10	mg/Kg wet	5.00 5.00		69.2	40-140			
2-Methylnaphthalene	3.46	0.10	mg/Kg wet	5.00		62.7	40-140			
Naphthalene	2.94	0.10	mg/Kg wet	5.00		58.7	40-140			
Phenanthrene	3.86	0.10	mg/Kg wet	5.00		77.2	40-140			
Pyrene	3.92	0.10	mg/Kg wet	5.00		78.5	40-140			
n-Decane	2.17	0.50	mg/Kg wet	5.00		43.4	40-140			
n-Docosane	3.85	0.50	mg/Kg wet	5.00		77.0	40-140			
n-Dodecane	2.76	0.50	mg/Kg wet	5.00		55.3	40-140			
n-Eicosane	3.74	0.50	mg/Kg wet	5.00		74.8	40-140			
n-Hexacosane	3.94	0.50	mg/Kg wet	5.00		78.7	40-140			
n-Hexadecane	3.63	0.50	mg/Kg wet	5.00		72.6	40-140			
n-Hexatriacontane	3.55	0.50	mg/Kg wet	5.00		70.9	40-140			
Vonadecane	3.76	0.50	mg/Kg wet	5.00		75.3	40-140			
Nonane	1.44	0.50	mg/Kg wet	5.00		28.9 *	30-140			L-07
n-Octacosane	3.87	0.50	mg/Kg wet	5.00		77.4	40-140			
n-Octadecane	3.78	0.50	mg/Kg wet	5.00		75.7	40-140			
n-Tetracosane	3.87	0.50	mg/Kg wet	5.00		77.3	40-140			
n-Tetradecane	3.31	0.50	mg/Kg wet	5.00		66.2	40-140			
n-Triacontane	3.96	0.50	mg/Kg wet	5.00		79.2	40-140			
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	3.55		mg/Kg wet	5.00		70.9	40-140			
Surrogate: o-Terphenyl (OTP)	3.70		mg/Kg wet	5.00		74.0	40-140			
Surrogate: 2-Bromonaphthalene	4.66		mg/Kg wet	5.00		93.3	40-140			
Surrogate: 2-Fluorobiphenyl	4.96		mg/Kg wet	5.00		99.2	40-140			
LCS Dup (B248185-BSD1)					12/19 Analy					
C9-C18 Aliphatics	20.0	10	mg/Kg wet	30.0		66.6	40-140	4.25	25	
C19-C36 Aliphatics	34.8	10	mg/Kg wet	40.0		87.1	40-140	3.14	25	
Unadjusted C11-C22 Aromatics	65.2	10	mg/Kg wet	85.0		76.7	40-140	2.93	25 25	
Acceptable	3.59	0.10	mg/Kg wet	5.00		71.8	40-140	2.17	25	
Acenaphthylene	3.34	0.10	mg/Kg wet mg/Kg wet	5.00		66.8	40-140 40-140	3.26 4.54	25 25	
Anthracene Benzo(a)anthracene	3.57	0.10 0.10	mg/Kg wet	5.00		71.4 72.5	40-140 40-140	4.54 4.86	25 25	
Benzo(a)antnracene Benzo(a)pyrene	3.63	0.10	mg/Kg wet	5.00 5.00		69.3	40-140 40-140	4.86	25 25	
Benzo(a)pyrene Benzo(b)fluoranthene	3.47	0.10	mg/Kg wet	5.00		71.2	40-140	3.98	25	
Benzo(g,h,i)perylene	3.56 3.42	0.10	mg/Kg wet	5.00		68.4	40-140	3.30	25	
Benzo(k)fluoranthene	3.42	0.10	mg/Kg wet	5.00		69.9	40-140	4.22	25	
Chrysene	3.69	0.10	mg/Kg wet	5.00		73.9	40-140	4.79	25	
Dibenz(a,h)anthracene	3.54	0.10	mg/Kg wet	5.00		70.8	40-140	3.37	25	
"uoranthene	3.66	0.10	mg/Kg wet	5.00		73.1	40-140	4.85	25	
orene	3.59	0.10	mg/Kg wet	5.00		71.7	40-140	1.73	25	
Indeno(1,2,3-cd)pyrene	3.37	0.10	mg/Kg wet	5.00		67.4	40-140	2.68	25	
2-Methylnaphthalene	3.37	0.10	mg/Kg wet	5.00		67.3	40-140	7.06	25	
Naphthalene	3.25	0.10	mg/Kg wet	5.00		65.0	40-140	10.2	25	
Phenanthrene	3.69	0.10	mg/Kg wet	5.00		73.8	40-140	4.54	25	



# Petroleum Hydrocarbons Analyses - EPH - Quality Control

Asslan	D	Reporting	** **	Spike	Source	WREG	%REC	222	RPD	<b>N</b> .
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B248185 - SW-846 3546										
LCS Dup (B248185-BSD1)			F	repared: 12	/12/19 Anal	yzed: 12/15/1	19			
Pyrene	3.73	0.10	mg/Kg wet	5.00		74.7	40-140	4.92	25	
n-Decane	2.52	0.50	mg/Kg wet	5.00		50.4	40-140	14.8	25	
n-Docosane	3.69	0.50	mg/Kg wet	5.00		73.8	40-140	4.25	25	
n-Dodecane	3.04	0.50	mg/Kg wet	5.00		60.9	40-140	9.63	25	
n-Eicosane	3.59	0.50	mg/Kg wet	5.00		71.7	40-140	4.14	25	
n-Hexacosane	3.81	0.50	mg/Kg wet	5.00		76.2	40-140	3.27	25	
n-Hexadecane	3.55	0.50	mg/Kg wet	5.00		71.0	40-140	2.21	25	
n-Hexatriacontane	3.48	0.50	mg/Kg wet	5.00		69.7	40-140	1.76	25	
n-Nonadecane	3.63	0.50	mg/Kg wet	5.00		72.6	40-140	3.64	25	
n-Nonane	1.70	0.50	mg/Kg wet	5.00		34.0	30-140	16.3	25	
n-Octacosane	3.75	0.50	mg/Kg wet	5.00		74.9	40-140	3.20	25	
n-Octadecane	3.65	0.50	mg/Kg wet	5.00		73.0	40-140	3.58	25	
n-Tetracosane	3.74	0.50	mg/Kg wet	5.00		74.7	40-140	3.37	25	
n-Tetradecane	3.43	0.50	mg/Kg wet	5.00		68.6	40-140	3.51	25	
n-Triacontane	3.83	0.50	mg/Kg wet	5.00		76.7	40-140	3.25	25	
Naphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
Surrogate: Chlorooctadecane (COD)	3.50		mg/Kg wet	5.00		70.1	40-140			
Surrogate: o-Terphenyl (OTP)	3.49		mg/Kg wet	5.00		69.8	40-140			
Surrogate: 2-Bromonaphthalene	5.06		mg/Kg wet	5.00		101	40-140			
rrogate: 2-Fluorobiphenyl	5.35		mg/Kg wet	5.00		107	40-140			



# QUALITY CONTROL

# Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248100 - SW-846 7471	NW.									
Blank (B248100-BLK1)				Prepared: 12	2/11/19 Analy	zed: 12/12/	/19			
Mercury	ND	0.025	mg/Kg wet				*****			
LCS (B248100-BS1)				Prepared: 12	2/11/19 Analy	zed: 12/12	/19			
Mercury	6.65	0.39	mg/Kg wet	7.61		87.3	72.7-127.3			
LCS Dup (B248100-BSD1)				Prepared: 12	2/11/19 Analy	zed: 12/12	/19			
Mercury	7.27	0.38	mg/Kg wet	7.61		95.5	72.7-127.3	8.91	20	
Batch B248270 - SW-846 3050B										
Blank (B248270-BLK1)				Prepared: 12	2/12/19 Analy	zed: 12/16	/19			
Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	1.7	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.17	mg/Kg wet							
Chromium	ND	0.33	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Nickel	ND	0.33	mg/Kg wet							
?elenium	ND	3.3	mg/Kg wet							
ver	ND	0.33	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Vanadium	ND	0.67	mg/Kg wet							
Zinc	ND	0.67	mg/Kg wet							
LCS (B248270-BS1)				Prepared: 12	2/12/19 Analy	zed: 12/16	/19			
Antimony	119	5.0	mg/Kg wet	147		80.7	4.2-196.6			
Arsenic	140	5.0	mg/Kg wet	143		98.0	83.2-117.5			
Barium	424	5.0	mg/Kg wet	415		102	82.7-117.6			
Beryllium	173	0.50	mg/Kg wet	179		96.6	83.2-117.3			
Cadmium	54.0	0.50	mg/Kg wet	56.2		96.0	82.9-117.3			
Chromium	97.6	1.0	mg/Kg wet	101		96.7	82.4-116.8			
Lead	124	1.5	mg/Kg wet	125		99.2	82.4-116.8			
Nickel	107	1.0	mg/Kg wet	108		99.3	82.9-117.6			
Selenium	73.4	10	mg/Kg wet	77.9		94.2	79.3-120.7			
Silver	39.1	1.0	mg/Kg wet	34.3		114	81-119.2			
Thallium	121	5.0	mg/Kg wet	113		107	80.8-118.6			
Vanadium 	79.0	2.0	mg/Kg wet	83.7		94.3	79.8-120.7			
Zinc	225	2.0	mg/Kg wet	240		94.0	80.8-118.8			
LCS (B248270-BS2) MRL Check				Prepared: 12	2/12/19 Analy	zed: 12/16	/19	,.	-192	
Lead	0.504	0.49	mg/Kg wet	0.490		103	82.4-116.8			



# QUALITY CONTROL

# Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248270 - SW-846 3050B										
LCS Dup (B248270-BSD1)			I	Prepared: 12	/12/19 Anal	yzed: 12/16/	′19		,,,,,	
Antimony	113	5.0	mg/Kg wet	147		76.7	4.2-196.6	5.08	30	
Arsenic	138	5.0	mg/Kg wet	143		96.5	83.2-117.5	1.56	30	
Barium	416	5.0	mg/Kg wet	415		100	82.7-117.6	2.01	20	
Beryllium	173	0.50	mg/Kg wet	179		96.7	83.2-117.3	0.0885	30	
Cadmium	54.2	0.50	mg/Kg wet	56.2		96.4	82.9-117.3	0.400	20	
Chromium	96.3	1.0	mg/Kg wet	101		95.3	82.4-116.8	1.37	30	
ead	121	1.5	mg/Kg wet	125		97.1	82.4-116.8	2.13	30	
lickel	107	1.0	mg/Kg wet	108		98.6	82.9-117.6	0.640	30	
elenium	71.1	10	mg/Kg wet	77.9		91.2	79.3-120.7	3.17	30	
ilver	38.4	1.0	mg/Kg wet	34.3		112	81-119.2	1.77	30	
hallium	120	5.0	mg/Kg wet	113		107	80.8-118.6	0.661	30	
anadium	77.5	2.0	mg/Kg wet	83.7		92.6	79.8-120.7	1.90	30	
Cinc	222	2.0	mg/Kg wet	240		92.7	80.8-118.8	1.37	30	



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 FLAG/QUALIFIER SUMMARY

•	QC result is outside of established filmits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.



# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications	
MADEP-EPH-04-1.1 in Soil		
C9-C18 Aliphatics	CT,NC,ME,NH-P	
C19-C36 Aliphatics	CT,NC,ME,NH-P	
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P	
C11-C22 Aromatics	CT,NC,ME,NH-P	
Acenaphthene	CT,NC,ME,NH-P	
Acenaphthylene	CT,NC,ME,NH-P	
Anthracene	CT,NC,ME,NH-P	
Benzo(a)anthracene	CT,NC,ME,NH-P	
Benzo(a)pyrene	CT,NC,ME,NH-P	
Benzo(b)fluoranthene	CT,NC,ME,NH-P	
Benzo(g,h,i)perylene	CT,NC,ME,NH-P	
Benzo(k)fluoranthene	CT,NC,ME,NH-P	
Chrysene	CT,NC,ME,NH-P	
Dibenz(a,h)anthracene	CT,NC,ME,NH-P	
Fluoranthene	CT,NC,ME,NH-P	
Fluorene	CT,NC,ME	
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P	
2-Methylnaphthalene	CT,NC	
Naphthalene	CT,NC,ME,NH-P	
Phenanthrene	CT,NC,ME,NH-P	
Pyrene	CT,NC,ME,NH-P	
MADEP-EPH-04-1.1 in Water		
C9-C18 Aliphatics	CT,NC,ME,NH-P	
C19-C36 Aliphatics	CT,NC,ME,NH-P	
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P	
C11-C22 Aromatics	CT,NC,ME,NH-P	
Acenaphthene	CT,NC,ME,NH-P	
Acenaphthylene	CT,NC,ME,NH-P	
Anthracene	CT,NC,ME,NH-P	
Benzo(a)anthracene	CT,NC,ME,NH-P	
Benzo(a)pyrene	CT,NC,ME,NH-P	
Benzo(b)fluoranthene	CT,NC,ME,NH-P	
Benzo(g,h,i)perylene	CT,NC,ME,NH-P	
Benzo(k)fluoranthene	CT,NC,ME,NH-P	
Chrysene	CT,NC,ME,NH-P	
Dibenz(a,h)anthracene	CT,NC,ME,NH-P	
Fluoranthene	CT,NC,ME,NH-P	
Fluorene	CT,NC,ME	
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P	
2-Methylnaphthalene	CT,NC	
Naphthalene	CT,NC,ME,NH-P	
Phenanthrene	CT,NC,ME,NH-P	
Pyrene	CT,NC,ME,NH-P	
SW-846 6010D in Soil		
Antimony	CT,NH,NY,ME,VA,NC	
Arsenic	CT,NH,NY,ME,VA,NC	
ruseme	CI,IMI,IMI, MI,IMC	- D 00



# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010D in Soil	
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8270D-E in Soil	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chioronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH



# CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D-E in Soil	
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine/Azobenzene	NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	СТ, NY, NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH
SW-846 8270D-E in Water	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY
Aniline	CT,NY
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	СТ, NY, NH
Chrysene	CT,NY,NH



# CERTIFICATIONS

ertified Analyses included in this Report

Analyte	Certifications	
SW-846 8270D-E in Water		
Dibenz(a,h)anthracene	CT,NY,NH	
Dibenzofuran	CT,NY,NH	
Di-n-butylphthalate	CT,NY,NH	
1,2-Dichlorobenzene	CT,NY,NH	
1,3-Dichlorobenzene	CT,NY,NH	
1,4-Dichlorobenzene	CT,NY,NH	
3,3-Dichlorobenzidine	CT,NY,NH	
2,4-Dichlorophenol	CT,NY,NH	
Diethylphthalate	CT,NY,NH	
2,4-Dimethylphenol	CT,NY,NH	
Dimethylphthalate	CT,NY,NH	
2,4-Dinitrophenol	CT,NY,NH	
2,4-Dinitrotoluene	CT,NY,NH	
2,6-Dinitrotoluene	CT,NY,NH	
Di-n-octylphthalate	CT,NY,NH	
1,2-Diphenylhydrazine/Azobenzene	NY	
Fluoranthene	CT,NY,NH	
Fluorene	NY,NH	
Hexachlorobenzene	CT,NY,NH	
Hexachlorobutadiene	СТ,NY,NH	
Hexachloroethane	CT,NY,NH	
Indeno(1,2,3-cd)pyrene	СТ,NY,NH	
Isophorone	СТ,NY,NH	
2-Methylnaphthalene	CT,NY,NH	
2-Methylphenol	CT,NY,NH	
3/4-Methylphenol	CT,NY,NH	
Naphthalene	CT,NY,NH	
Nitrobenzene	CT,NY,NH	
2-Nitrophenol	CT,NY,NH	
4-Nitrophenol	CT,NY,NH	
Pentachlorophenol	CT,NY,NH	
Phenanthrene	CT,NY,NH	
Phenol	CT,NY,NH	
Pyrene	CT,NY,NH	
1,2,4-Trichlorobenzene	CT,NY,NH	
2,4,5-Trichlorophenol	CT,NY,NH	
2,4,6-Trichlorophenol	CT,NY,NH	



The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

Table of Contents Prepackaged Cooler? Y / N "Contest is not responsible for missing samples from prepacked Glassware in freezer? Y / N Glassware in the fridge? Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. Th Chain of Custody is a legal document that must be complete and accurate and is used to determine wh analyses the taboratory will perform: Any missing information is not the taboratory's responsibility. Co N = Nitric Acid S = Sulfuric Acid B = Sodium Bisulfate X = Sodium Hydroxide GW = Ground Water WW = Waste Water DW = Drinking Water Total Number Of: <sup>2</sup> Preservation Codes. SL = Studge SOL = Solid O = Other (please Courier Use Only Thiosulfate
O = Other (please define) Matrix Codes: Non Soxhlet PCB ONLY coolers Soxhlet BACTERIA Y/N H.HCL M ≈ Methanol PLASTIC GLASS ENCORE - Sodium VIALS A = Air S = Soil define) possible sample concentration within the Conc H - High; M - Medium; L - Low; C - Clean; U Please use the following codes to indicate Chromatogram AIHA-LAP, LLC held accountable; Code column above: ANALYSIS REQUESTED Other Doc # 381 Rev 2\_06262019 HO HOD STOLDER d MCP Certification Form Required RCP Certification Form Required MA MCP Required CT RCP Require MA State DW Required תניט 3 39 Spruce Street
East Longmeadow, MA 01028
Dissolved Metals Samples ENCORE BACTERIA Email TO: A Sundans & cda Cansundar 75 can EXCEL phosphate Sam Field Filtered Field Filtered Lab to Filter Lab to Filter PLASTIC School WBTA GLASS CHAIN OF CUSTODY RECORD VIALS Data Delivery PDF Z 00 0 0 1 ÷ S http://www.contestlabs.com Municipality Brownfield Due Date: # QISMd 10-Day 3-Day ٠, 4-Day Rush-Approval R CLP Like Data Pkg Required: (60.43) Q > PFAS 10-Day (std) Government 14.5 150 7,7 Federal Fax To # Format: Other: -Day Client Comments: 2-Day Ç Project Entity (6) Jan. 多 Other: ~ ~ COUST-TOOLTS T-C Project Location 2 25 - 227 1354 VAST , WALTHAM -227 13570 LAS P116-01-19 9 131 6-050 Email: info@contestlabs.com 388 203-413-5 Sp3-5-(3-5. 2-4 NA 215 K Phone: 413-525-2332 Fax; 413-525-6405 Date/Time: Ke THY CANSOL Date/} B 9 2 5 38 387 -26.57 からからへ To a second 1250,0 1960296 6 Human 373733 Con-Test Quote Name/Number: Con-test eceived by: (signature) elinquished by signer Project Manager: nvoice Recipient: Project Number: Project Name: 3 comped by: MW 1 ampled By: Address:

Page 34 of 36

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples\_



Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False

Client C	)W		Date	1075	- [ 17	Time	0.55	
_	825		- Date	10/1/0	119	- IIMe	<u>2030</u>	
How were the samples	In Cooler	<u></u>	No Cooler		On Ice		No Ice	
received?	Direct from Sam	pling			Ambient		Melted Ice	
Were samples within		By Gun#	2		Actual Tem	1p - 4,1	<del></del>	
Temperature? 2-6°C	T	By Blank #			Actual Tem	ID -		•
Was Custody S	Seal Intact?	n ia		re Sample	s Tampered		1)4	-
Was COC Reli		T			ree With Sa		~ ~	•
	leaking/loose caps	on any sam		F	100 111111100	mpics.		•
Is COC in ink/ Legible?	T	orrang can.	•	noles recei	ved within h	olding time?	-	
Did COC include all	Client	- T	Analysis	•		er Name		•
pertinent Information?			ID's	Ÿ		Dates/Time	s = =	•
Are Sample labels fille	•	7	•					•
Are there Lab to Filters		F	•	Who was	s notified?			
Are there Rushes?		F			s notified?			•
Are there Short Holds?		E			s notified?			•
s there enough Volume		7			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
s there Headspace wh	ere applicable?	nla		MS/MSD?	F			
Proper Media/Containe	rs Used?	T			samples rec	puired?	F	
/ere trip blanks receiv		F		On COC?				
Oo all samples have the		**************************************		nh		Base	nla	
7):(S)	Centaines							7240
Jnp-	1 Liter Amb.		1 Liter F	Plastic		16 o	z Amb.	
ICL-	500 mL Amb.		500 mL		***************************************		mb/Clear	3
Meoh-	250 mL Amb.		250 mL				nb/Clear	
Bisulfate-	Flashpoint		Col./Ba	cteria		2oz Ar	mb/Clear	
01-	Other Glass		Other F	Plastic		En	core	
hiosulfate-	SOC Kit		Plastic			Frozen:		
Sulfuric-	Perchlorate	1.1	Ziplo	ck				
			Unused N	ledia				
Tialis #	Gonerages	W. I						
Jnp-	1 Liter Amb.		1 Liter F	Plastic		16 o	z Amb.	
ICL-	500 mL Amb.		500 mL				nb/Clear	
leoh-	250 mL Amb.		250 mL	Plastic		4oz Ar	nb/Clear	<del></del>
lisulfate-	Col./Bacteria		Flash	point		2oz Ar	nb/Clear	
) -	Other Plastic		Other (	Slass		En	core	***************************************
hiosulfate-	SOC Kit		Plastic	Bag		Frozen:		
sulfuric-	Perchlorate		Ziplo	ck				
`ammanta.								
omments:								
omments.								

		MADE	P MCP Analytical I	Method Report Cer	rtification Form				
Lab	Laboratory Name: Con-Test Analytical Laboratory Project #: 19L0396								
Proj	Project Location: 225-227 Beaver St, Waltham, MA RTN:								
		s certifications for a 19L0396-03	the following data se	t: [list Laboratory Sa	mple ID Number(s)]				
<u> </u>	ices:	Soil				·····	<del></del>		
		i (check all that	helow)						
	VOC	7470/7471 Hg	MassDEP VPH	8082 PCB	9014 Total	6860			
	1 II A ( )	CAM IIIB (X)	CAM IV A ()	CAM VA()	Cyanide/PAC CAM VI A ( )	Perchlo	orate ′III B()		
	SVOC IIIB (X)	7010 Metals CAM III C ()	MassDEP VPH CAM IV C ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassD CAM IX	EP APH K A ( )		
	Metals	6020 Metals CAM III D ()	MassDEP EPH CAM IV B (X)	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 CAM I)			
	A	ffirmative response	to Questions A throu	ghF is required for "l	Presumptive Certainty"	status			
A Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?							□No¹		
В		ytical method(s) and al	l associated QC requiren	nents specificed in the se	elected CAM	☑ Yes	□No¹		
C Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?							□No¹		
Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?							□No¹		
Ea			Vas each method conduction		),	☑ Yes	□No¹		
Εb	APH and TO-1	5 Methods only: Was t	he complete analyte list r	reported for each method	1?	☐ Yes	□No¹		
F			and performance standa			☑ Yes	□No¹		
	A response	to questions G, H	and I below is require	d for "Presumptive C	Certainty" status				
G	protocol(s)?		all CAM reporting limits s			☑ Yes	□No¹		
			esumptive Certainty" described in 310 CMI	_	ssarily meet the data us WSC-07-350.	sability			
Н	Were all QC pe	erfomance standards s	pecified in the CAM proto	ocol(s) achieved?		□ <sub>Yes</sub>	☑ <sub>No¹</sub>		
ı	Were results re	ported for the complet	e analyte list specified in	the selected CAM proto	col(s)?	☑ Yes	□No¹		
<sup>1</sup> All	Negative respo	onses must be addre	ssed in an attached Er	nvironmental Laborato	ry case narrative.				
thos	se responsible		nformation, the mater		pon my personal inqui analytical report is, to ti				
Sign	nature:	hisa W	forthungton_	Position:	Technical Represent	tative			
Prin	ited Name:	Lisa A. Worthingt	on	Date:	12/16/19				



December 17, 2019

Alan Sundquist CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

Project Location: 240 Beaver St. Waltham, MA

Client Job Number: Project Number: 1830.1

Laboratory Work Order Number: 19L0400

Michelle Koch

Enclosed are results of analyses for samples received by the laboratory on December 10, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Koch Project Manager

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CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 ATTN: Alan Sundquist

PURCHASE ORDER NUMBER:

REPORT DATE: 12/17/2019

PROJECT NUMBER:

1830.1

# ANALYTICAL SUMMARY

WORK ORDER NUMBER:

19L0400

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

240 Beaver St. Waltham, MA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Gp4-1 (3-5')	19L0400-01	Soil	,	SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
Gp4-2 (4-6')	19L0400-02	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
Gp4-3 (4-6')	19L0400-03	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
Gp4-4 (3-5')	19L0400-04	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
Gp4-5 (6-8')	19L0400-05	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
Gp4-6 (3-5')	19L0400-06	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
Gp4-7 (3-5')	19L0400-07	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
Gp4-9 (0-2')	19L0400-08	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
Gp4-2 (6-8')	19L0400-09	Soil		SM 2540G	
				SW-846 8082A	



## CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.



SW-846 6010D

#### Qualifications:

MS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be climinated. Analyte & Samples(s) Qualified:

Antimony

19L0400-01[Gp4-1 (3-5')], B248351-MS1

19L0400-01[Gp4-1 (3-5')], B248351-MS1

SW-846 8082A

#### Qualifications:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences. Analyte & Samples(s) Qualified:

Decachlorobiphenyl

19L0400-09[Gp4-2 (6-8')]

Decachlorobiphenyl [2C]

19L0400-09[Gp4-2 (6-8')]

Tetrachloro-m-xylene

19L0400-09[Gp4-2 (6-8')]

Tetrachloro-m-xylene [2C]

19L0400-09[Gp4-2 (6-8')]

SW-846 8270D-E

#### Qualifications:

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

3,3-Dichlorobenzidine

19L0400-01[Gp4-1 (3-5')], B248158-MS1, B248158-MSD1

4-Chloroaniline

19L0400-01[Gp4-1 (3-5')], B248158-MS1, B248158-MSD1

Aniline

19L0400-01[Gp4-1 (3-5')], B248158-MS1, B248158-MSD1

Hexachloroethane

19L0400-01[Gp4-1 (3-5')], B248158-MS1, B248158-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

1,4-Dichlorobenzene

B248158-MS1

2-Chloronaphthalene

B248158-MS1

Hexachlorobenzene

B248158-MS1

RL-08

Elevated reporting limit due to sample matrix interference. MA CAM reporting limit not met.

## Analyte & Samples(s) Qualified:

19L0400-01[Gp4-1 (3-5')], 19L0400-02[Gp4-2 (4-6')], 19L0400-03[Gp4-3 (4-6')], 19L0400-04[Gp4-4 (3-5')], 19L0400-05[Gp4-5 (6-8')], 19L0400-05[Gp4-6 (3-5')], )L0400-07[Gp4-7 (3-5')]



V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

### Analyte & Samples(s) Qualified:

#### Pentachlorophenol

 $19L0400-04[Gp4-4\ (3-5')],\ 19L0400-05[Gp4-5\ (6-8')],\ 19L0400-06[Gp4-6\ (3-5')],\ 19L0400-07[Gp4-7\ (3-5')],\ 19L0400-08[Gp4-9\ (0-2')],\ S043741-CCV1,\ S043758-CCV1$ 

#### Pyrene

19L0400-01[Gp4-1 (3-5')], 19L0400-02[Gp4-2 (4-6')], 19L0400-03[Gp4-3 (4-6')], B248158-BLK1, B248158-BS1, B248158-BSD1, B248158-MS1, B248158-MSD1, S043694-CCV1

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

# estimated. Analyte & Samples(s) Qualified:

#### 4-Chloroaniline

 $19L0400-04[Gp4-4\ (3-5')],\ 19L0400-05[Gp4-5\ (6-8')],\ 19L0400-06[Gp4-6\ (3-5')],\ 19L0400-07[Gp4-7\ (3-5')],\ 19L0400-08[Gp4-9\ (0-2')],\ S043741-CCV1,\ S043758-CCV1$ 

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington Technical Representative

na Wasslengton

Work Order: 19L0400



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Date Received: 12/10/2019
Field Sample #: Gp4-1 (3-5')

Sampled: 12/9/2019 08:05

Sample ID: 19L0400-01

Sample Matrix: Soil

Sample Flags: RL-08

Semivolatile Organic Compounds by GC/MS

Analyte							Date	Date/Time	
Acenaphthene	Results	RL	Units	Dilution	Flag/Qual	Method	Preparec	l Analyzed	Analyst
Acenaphthylene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Acetophenone	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Aniline	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Anthracene	ND	0.72	mg/Kg dry	2	MS-09	SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Benzo(a)anthracene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Benzo(a)pyrene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Benzo(b)fluoranthene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Benzo(g,h,i)perylene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Benzo(k)fluoranthene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Bis(2-chloroethoxy)methane	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Bis(2-chloroethyl)ether	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Bis(2-chloroisopropyl)ether	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Bis(2-Ethylhexyl)phthalate	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
4-Bromophenylphenylether	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	
Butylbenzylphthalate	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
I-Chloroaniline	ND	1.4	mg/Kg dry	2	MS-09	SW-846 8270D-E	12/11/19		IMR
2-Chloronaphthalene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
-Chlorophenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E		12/12/19 17:41	IMR
Chrysene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19 12/11/19	12/12/19 17:41	IMR
Dibenz(a,h)anthracene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E		12/12/19 17:41	IMR
Dibenzofuran	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
i-n-butylphthalate	ND	0.72	mg/Kg dry	2			12/11/19	12/12/19 17:41	IMR
2-Dichlorobenzene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
3-Dichlorobenzene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
4-Dichlorobenzene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
3-Dichlorobenzidine	ND	0.36	mg/Kg dry		MC 00	SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
4-Dichlorophenol	ND	0.72	mg/Kg dry	2	MS-09	SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
iethylphthalate	ND	0.72		2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
4-Dimethylphenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
methylphthalate	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
1-Dinitrophenol	ND		mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
4-Dinitrotoluene		1.4	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
5-Dinitrotoluene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
-n-octylphthalate	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
-Diphenylhydrazine/Azobenzene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
oranthene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
orene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
xachlorobenzene		0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
xachlorobutadiene		0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
		0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19		IMR
eachloroethane	ND	0.72	mg/Kg dry	2	MS-09	SW-846 8270D-E			IMR
eno(1,2,3-cd)pyrene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E			IMR
phorone	ND	0.72	mg/Kg dry	2		SW-846 8270D-E			IMR
fethylnaphthalene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E			IMR

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Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-1 (3-5')

Sampled: 12/9/2019 08:05

Sample ID: 19L0400-01
Sample Matrix: Soil

Sample Flags: RL-08		Semi	volatile Organic Co	mpounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
3/4-Methylphenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Naphthalene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Nitrobenzene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
2-Nitrophenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
4-Nitrophenol	ND	1.4	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Pentachlorophenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Phenanthrene	ND	0.36	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Phenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Pyrene	ND	0.36	mg/Kg dry	2	V-05	SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
1,2,4-Trichlorobenzene	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
2,4,5-Trichlorophenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
2,4,6-Trichlorophenol	ND	0.72	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 17:41	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		48.4	30-130					12/12/19 17:41	
Phenol-d6		48.2	30-130					12/12/19 17:41	
Nitrobenzene-d5		44.5	30-130					12/12/19 17:41	
2-Fluorobiphenyl		55.0	30-130					12/12/19 17:41	
2,4,6-Tribromophenol		47.8	30-130					12/12/19 17:41	
p-Terphenyl-d14		53.4	30-130					12/12/19 17:41	



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019 Field Sample #: Gp4-1 (3-5')

Sampled: 12/9/2019 08:05

Sample ID: 19L0400-01 Sample Matrix: Soil

			Metals Analy	yses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1	MS-07	SW-846 6010D	12/13/19	12/16/19 21:10	МЈН
Arsenic	12	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЈН
Barium	37	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЈН
Beryllium	0.37	0.18	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЈН
Cadmium	0.25	0.18	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	MJH
Chromium	31	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЛН
Lead	46	0.53	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЈН
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 11:51	CJV
Nickel	22	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЈН
Selenium	ND	3.5	mg/Kg dry	1	MS-07	SW-846 6010D	12/13/19	12/16/19 21:10	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЈН
Thallium	ND	1.8	mg/Kg dry	I		SW-846 6010D	12/13/19	12/16/19 21:10	МЈН
Vanadium	56	0.70	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЈН
Zinc	57	0.70	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:51	МЈН



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019 Field Sample #: Gp4-1 (3-5')

Sampled: 12/9/2019 08:05

Sample ID: 19L0400-01
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		94.3		% Wt	1		SM 2540G	12/11/19	12/11/19 15:03	adb

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019 Field Sample #: Gp4-2 (4-6')

Sampled: 12/9/2019 08:40

Sample ID: 19L0400-02

Samo	le M	(atrix:	Soi

Sample Matrix: Soil									
Sample Flags: RL-08			Semivolatile Organic C	ompounds by	GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Acenaphthylene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Acetophenone	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Aniline	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Anthracene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Benzo(a)anthracene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Benzo(a)pyrene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Benzo(b)fluoranthene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Benzo(g,h,i)perylene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Benzo(k)fluoranthene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Bis(2-chloroethoxy)methane	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Bis(2-chloroethyl)ether	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Bis(2-chloroisopropyl)ether	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Bis(2-Ethylhexyl)phthalate	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
4-Bromophenylphenylether	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Butylbenzylphthalate	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
4-Chloroaniline	ND	1.5	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
2-Chloronaphthalene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
2-Chlorophenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Chrysene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Dibenz(a,h)anthracene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Dibenzofuran	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Di-n-butylphthalate	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
1,2-Dichlorobenzene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
1,3-Dichlorobenzene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
1,4-Dichlorobenzene	ND	0.75		2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
3.3-Dichlorobenzidine	ND ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
2,4-Dichlorophenol			mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
•	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Diethylphthalate	ND	0.75	mg/Kg dry				12/11/19	12/12/19 18:06	IMR
2,4-Dimethylphenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Dimethylphthalate	ND	0.75	mg/Kg dry	2		SW-846 8270D-E			
2,4-Dinitrophenol	ND	1.5	mg/Kg dry	2		SW-846 8270D-E	12/11/19 12/11/19	12/12/19 18:06 12/12/19 18:06	IMR DATE
2,4-Dinitrotoluene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E			IMR
2,6-Dinitrotoluene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Di-n-octylphthalate	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
1,2-Diphenylhydrazine/Azobenzene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Fluoranthene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Fluorene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Hexachlorobenzene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Hexachlorobutadiene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Hexachloroethane	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Indeno(1,2,3-cd)pyrene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Isophorone	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
2-Methylnaphthalene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-2 (4-6')

Sampled: 12/9/2019 08:40

Sample ID: 19L0400-02

Sample Matrix: Soil
Sample Flags: RL-08

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
3/4-Methylphenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Naphthalene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Nitrobenzene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
2-Nitrophenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
4-Nitrophenol	ND	1.5	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Pentachlorophenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Phenanthrene	ND	0.37	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Phenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Pyrene	ND	0.37	mg/Kg dry	2	V-05	SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
1,2,4-Trichlorobenzene	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
2,4,5-Trichlorophenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
2,4,6-Trichlorophenol	ND	0.75	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:06	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		48.7	30-130					12/12/19 18:06	
Phenol-d6		48.3	30-130					12/12/19 18:06	
Nitrobenzene-d5		44.0	30-130					12/12/19 18:06	
2-Fluorobiphenyl		57.5	30-130					12/12/19 18:06	
2,4,6-Tribromophenol		48.6	30-130					12/12/19 18:06	
p-Terphenyl-d14		57.2	30-130					12/12/19 18:06	

Work Order: 19L0400



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Date Received: 12/10/2019 Field Sample #: Gp4-2 (4-6')

Sampled: 12/9/2019 08:40

Sample ID: 19L0400-02 Sample Matrix: Soil

,			Metals Analy	yses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	l		SW-846 6010D	12/13/19	12/16/19 15:56	МЈН
Arsenic	5.3	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЛН
Barium	46	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЈН
Beryllium	0.25	0.18	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЈН
Cadmium	0.36	0.18	mg/Kg dry	I		SW-846 6010D	12/13/19	12/16/19 15:56	МЈН
Chromium	21	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЈН
Lead	35	0.53	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЛН
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 11:53	CJV
Nickel	13	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЈН
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЈН
Silver	1.9	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЛН
Thallium	ND	1.8	mg/Kg dry	ì		SW-846 6010D	12/13/19	12/16/19 21:16	МЛН
Vanadium	38	0.71	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЈН
Zinc	110	0.71	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 15:56	МЛН



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019
Field Sample #: Gp4-2 (4-6')

Sampled: 12/9/2019 08:40

Sample ID: 19L0400-02
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		90.8		% Wt	ī		SM 2540G	12/11/19	12/11/19 15:03	adb



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-3 (4-6')

Sampled: 12/9/2019 09:30

Sample ID: 19L0400-03

Sample Matrix: Soil

Sample Flags: RL-08			Semivolatile Organic C	compounds by	GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Acenaphthylene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Acetophenone	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Aniline	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Anthracene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Benzo(a)anthracene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Benzo(a)pyrene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Benzo(b)fluoranthene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Benzo(g,h,i)perylene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Benzo(k)fluoranthene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Bis(2-chloroethoxy)methane	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Bis(2-chloroethyl)ether	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Bis(2-chloroisopropyl)ether	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Bis(2-Ethylhexyl)phthalate	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
4-Bromophenylphenylether	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Butylbenzylphthalate	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
4-Chloroaniline	ND	1.4	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2-Chloronaphthalene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2-Chlorophenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Chrysene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Dibenz(a,h)anthracene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Dibenzofuran	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Di-n-butylphthalate	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
1,2-Dichlorobenzene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
1,3-Dichlorobenzene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
1,4-Dichlorobenzene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
3,3-Dichlorobenzidine	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2,4-Dichlorophenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Diethylphthalate	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2,4-Dimethylphenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Dimethylphthalate	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2,4-Dinitrophenol	ND	1.4	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2,4-Dinitrotoluene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2,6-Dinitrotoluene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Di-n-octylphthalate	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
1,2-Diphenylhydrazine/Azobenzene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Fluoranthene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Fluorene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Hexachlorobenzene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
iexachlorobutadiene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Hexachloroethane	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Indeno(1,2,3-cd)pyrene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Isophorone	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2-Methylnaphthalene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR

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Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-3 (4-6')

Sampled: 12/9/2019 09:30

Sample ID: 19L0400-03

Sample	Matrix	: Soil
Sample	Flags:	RL-08

Semivolatile	Organic	Compounds	by ·	GC/MS
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
3/4-Methylphenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Naphthalene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Nitrobenzene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2-Nitrophenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
4-Nitrophenol	ND	1.4	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Pentachlorophenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Phenanthrene	ND	0.35	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Phenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Pyrene	ND	0.35	mg/Kg dry	2	V-05	SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
1,2,4-Trichlorobenzene	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2,4,5-Trichlorophenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
2,4,6-Trichlorophenol	ND	0.71	mg/Kg dry	2		SW-846 8270D-E	12/11/19	12/12/19 18:31	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual	<del></del>			
2-Fluorophenol		39.8	30-130					12/12/19 18:31	
Phenol-d6		38.8	30-130					12/12/19 18:31	
Nitrobenzene-d5		35.2	30-130					12/12/19 18:31	
2-Fluorobiphenyl		44.7	30-130					12/12/19 18:31	
2,4,6-Tribromophenol		38.7	30-130					12/12/19 18:31	
p-Terphenyl-d14		43.8	30-130					12/12/19 18:31	



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019
Field Sample #: Gp4-3 (4-6')

Sampled: 12/9/2019 09:30

Sample ID: 19L0400-03
Sample Matrix: Soil

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЛН
Arsenic	7.9	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Barium	31	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЛН
Beryllium	0.31	0.18	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Cadmium	ND	0.18	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Chromium	34	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Lead	39	0.53	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 11:55	CJV
Nickel	23	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Selenium	ND	3.5	mg/Kg dry	l		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 21:36	МЈН
Vanadium	62	0.70	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН
Zinc	51	0.70	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:15	МЈН



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019
Field Sample #: Gp4-3 (4-6')

Sampled: 12/9/2019 09:30

Sample ID: 19L0400-03
Sample Matrix: Soil

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	93.9		% Wt	1		SM 2540G	12/11/19	12/11/19 15:04	adb

Work Order: 19L0400



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Date Received: 12/10/2019
Field Sample #: Gp4-4 (3-5')

Sampled: 12/9/2019 09:50

Sample ID: 19L0400-04
Sample Matrix: Soil

Sample Flags: RL-08

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Acenaphthylene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Асеторнепопе	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Aniline	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Anthracene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Benzo(a)anthracene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Benzo(a)pyrene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Benzo(b)fluoranthene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Benzo(g,h,i)perylene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Benzo(k)fluoranthene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Bis(2-chloroethoxy)methane	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Bis(2-chloroethyl)ether	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Bis(2-chloroisopropyl)ether	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Bis(2-Ethylhexyl)phthalate	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
4-Bromophenylphenylether	ND	1,7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Butylbenzylphthalate	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
1-Chloroaniline	ND	3.4	mg/Kg dry	4	V-34	SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2-Chloronaphthalene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2-Chlorophenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Chrysene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Dibenz(a,h)anthracene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Dibenzofuran	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Di-n-butylphthalate	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
1,2-Dichlorobenzene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
1,3-Dichlorobenzene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
1,4-Dichlorobenzene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
3,3-Dichlorobenzidine	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2,4-Dichlorophenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Diethylphthalate	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2,4-Dimethylphenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Dimethylphthalate	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2,4-Dinitrophenol	ND	3.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2,4-Dinitrotoluene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2,6-Dinitrotoluene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Di-n-octylphthalate	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Fluoranthene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Fluorene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Hexachlorobenzene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Hexachlorobutadiene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Hexachloroethane	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Indeno(1,2,3-cd)pyrene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Isophorone	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2-Methylnaphthalene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB

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Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-4 (3-5')

Sampled: 12/9/2019 09:50

Sample ID: 19L0400-04

Sample Matrix: Soil

Sample Flags: RL-08		Semi	volatile Organic Co	mpounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
3/4-Methylphenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Naphthalene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Nitrobenzene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2-Nitrophenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
4-Nitrophenol	ND	3.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Pentachlorophenol	ND	1.7	mg/Kg dry	4	V-05	SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Phenanthrene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Phenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Pyrene	ND	0.86	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
1,2,4-Trichlorobenzene	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2,4,5-Trichlorophenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
2,4,6-Trichlorophenol	ND	1.7	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:07	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		49.4	30-130					12/13/19 21:07	
henol-d6		52.3	30-130					12/13/19 21:07	
Nitrobenzene-d5		48.1	30-130					12/13/19 21:07	
2-Fluorobiphenyl		51.1	30-130					12/13/19 21:07	
2,4,6-Tribromophenol		34.5	30-130					12/13/19 21:07	
p-Terphenyl-d14		51.1	30-130					12/13/19 21:07	



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019
Field Sample #: Gp4-4 (3-5')

Sampled: 12/9/2019 09:50

Sample ID: 19L0400-04
Sample Matrix: Soil

			Metals Analy	ses (Total)	•				***************************************
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.1	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Arsenic	7.9	2.1	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЛН
Barium	46	2.1	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Beryllium	0.44	0.21	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Cadmium	ND	0.21	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Chromium	29	0.43	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЛН
Lead	28	0.64	mg/Kg dry	İ		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Mercury	0.036	0.033	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 12:00	CJV
Nickel	22	0.43	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Selenium	ND	4.3	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Silver	ND	0.43	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Thallium	ND	2.1	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 21:42	МЛН
Vanadium	56	0.85	mg/Kg dry	l		SW-846 6010D	12/13/19	12/16/19 16:21	МЈН
Zinc	65	0.85	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:21	МЛН



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-4 (3-5')

Sampled: 12/9/2019 09:50

Sample ID: 19L0400-04
Sample Matrix: Soil

							Date	Date/Time	
Analyt	e Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	77.4		% Wt	1		SM 2540G	12/11/19	12/11/19 15:04	adb



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019 Field Sample #: Gp4-5 (6-8')

Sampled: 12/9/2019 10:20

Sample ID: 19L0400-05 Sample Matrix: Soil

Sample Flags: RL-08			Semivolatile Organic C	ompounds by	GC/MS	,		-	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Acenaphthylene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Acetophenone	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Aniline	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Anthracene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Benzo(a)anthracene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Benzo(a)pyrene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Benzo(b)fluoranthene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Benzo(g,h,i)perylene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Benzo(k)fluoranthene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Bis(2-chloroethoxy)methane	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Bis(2-chloroethyl)ether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Bis(2-chloroisopropyl)ether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Bis(2-Ethylhexyl)phthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
4-Bromophenylphenylether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Butylbenzylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
4-Chloroaniline	ND	2.8	mg/Kg dry	4	V-34	SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2-Chloronaphthalene		1.4			V-3-4	SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2-Chlorophenol	ND		mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Chrysene	ND	1.4	mg/Kg dry	4					
•	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Dibenz(a,h)anthracene Dibenzofuran	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Di-n-butylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
1,2-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
1,3-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
1,4-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
3,3-Dichlorobenzidine	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2,4-Dichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Diethylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2,4-Dimethylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Dimethylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2,4-Dinitrophenol	ND	2.8	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2,4-Dinitrotoluene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2,6-Dinitrotoluene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Di-n-octylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Fluoranthene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Fluorene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Hexachlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Aexachlorobutadiene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Hexachloroethane	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Indeno(1,2,3-cd)pyrene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Isophorone	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2-Methylnaphthalene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
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Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019
Field Sample #: Gp4-5 (6-8')

Sampled: 12/9/2019 10:20

Sample ID: 19L0400-05

Samole Matrix: Soil Sample Flags: RL-08

Semivolatile Organic Compounds by GC/MS

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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
2-Methylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
3/4-Methylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Naphthalene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Nitrobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2-Nitrophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
4-Nitrophenol	ND	2.8	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Pentachlorophenol	ND	1.4	mg/Kg dry	4	V-05	SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Phenanthrene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Phenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Pyrene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
1,2,4-Trichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2,4,5-Trichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
2,4,6-Trichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:30	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		50.1	30-130	**************************************				12/13/19 21:30	
Phenol-d6		54.0	30-130					12/13/19 21:30	
Nitrobenzene-d5		48.1	30-130					12/13/19 21:30	
2-Fluorobiphenyl		54.0	30-130					12/13/19 21:30	
2,4,6-Tribromophenol		33.8	30-130					12/13/19 21:30	
p-Terphenyl-d14		52.3	30-130					12/13/19 21:30	



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019 Field Sample #: Gp4-5 (6-8')

Sampled: 12/9/2019 10:20

Sample ID: 19L0400-05 Samole Matrix: Soil

			Metals Anal	ses (Total)		_			
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЛН
Arsenic	17	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЈН
Barium	28	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЛН
Beryllium	0.34	0.18	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЈН
Cadmium	0.27	0.18	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЈН
Chromium	29	0.36	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЛН
Lead	27	0.53	mg/Kg dry	l		SW-846 6010D	12/13/19	12/16/19 16:27	МЈН
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 12:02	СЈУ
Nickel	24	0.36	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЈН
Sclenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЛН
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЛН
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 21:48	МЛН
Vanadium	70	0.71	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЈН
Zinc	49	0.71	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:27	МЈН



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-5 (6-8')

Sampled: 12/9/2019 10:20

Sample ID: 19L0400-05

Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		92.7		% Wt	1		SM 2540G	12/11/19	12/11/19 15:05	adb



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-6 (3-5')

Sampled: 12/9/2019 10:55

Sample ID: 19L0400-06
Sample Matrix: Soil

Semivolatil	: Organic	Compounds	by GC/MS
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.72	mg/Kg dry	4	11-6 64-1	SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Acenaphthylene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Acetophenone	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Aniline	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Anthracene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Benzo(a)anthracene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Benzo(a)pyrene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Benzo(b)fluoranthene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Benzo(g,h,i)perylene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Benzo(k)fluoranthene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Bis(2-chloroethoxy)methane	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Bis(2-chloroethyl)ether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Bis(2-chloroisopropyl)ether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Bis(2-Ethylhexyl)phthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
4-Bromophenylphenylether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Butylbenzylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
4-Chloroaniline	ND	2.8	mg/Kg dry	4	V-34	SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2-Chloronaphthalene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2-Chlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Chrysene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Dibenz(a,h)anthracene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Dibenzofuran	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Di-n-butylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
1,2-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
1,3-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
1,4-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
3,3-Dichlorobenzidine	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2,4-Dichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Diethylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2,4-Dimethylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Dimethylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2,4-Dinitrophenol	ND	2.8	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2,4-Dinitrotoluene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2,6-Dinitrotoluene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Di-n-octylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Fluoranthene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Fluorene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Hexachlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
<b>Hexachlorobutadiene</b>	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Hexachloroethane	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Indeno(1,2,3-cd)pyrene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Isophorone	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2-Methylnaphthalene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
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Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-6 (3-5')

Sampled: 12/9/2019 10:55

Sample ID: 19L0400-06

Sample Matrix: Soil
Sample Flags: RL-08

Semivolatile Organic Compounds by GC/MS

<b>13</b>			•						
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
3/4-Methylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Naphthalene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Nitrobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2-Nitrophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
4-Nitrophenol	ND	2.8	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Pentachlorophenol	ND	1.4	mg/Kg dry	4	V-05	SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Phenanthrene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Phenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Pyrene	ND	0.72	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
1,2,4-Trichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2,4,5-Trichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
2,4,6-Trichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/13/19 21:53	KLB
Surrogates		% Recovery	Recovery Limits	<del></del>	Flag/Qual				
2-Fluorophenol		56.8	30-130					12/13/19 21:53	
Phenol-d6		60.9	30-130					12/13/19 21:53	
Nitrobenzene-d5		54.7	30-130					12/13/19 21:53	
2-Fluorobiphenyl		58.4	30-130					12/13/19 21:53	
2,4,6-Tribromophenol		42.7	30-130					12/13/19 21:53	
p-Terphenyl-d14		53.8	30-130					12/13/19 21:53	



Metals Analyses (Total)

Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-6 (3-5')

Sampled: 12/9/2019 10:55

Sample ID: 19L0400-06
Sample Matrix: Soil

					, , ,					
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЛН
Arsenic		11	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЛН
Barium		27	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН
Beryllium		0.30	0.17	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН
Cadmium		ND	0.17	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЛН
Chromium		32	0.34	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН
Lead		24	0.51	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН
Mercury		ND	0.027	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 12:04	CJV
Nickel		24	0.34	mg/Kg dry	I		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН
Selenium		ND	3.4	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН
Silver		ND	0.34	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН
Thallium		ND	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 21:55	МЈН
Vanadium		63	0.68	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН
Zinc		41	0.68	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:33	МЈН



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019
Field Sample #: Gp4-6 (3-5')

Sampled: 12/9/2019 10:55

Sample ID: 19L0400-06
Sample Matrix: Soil

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	93.7		% Wt	1		SM 2540G	12/11/19	12/11/19 15:05	adb



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-7 (3-5')

Sampled: 12/9/2019 11:30

Sample ID: 19L0400-07 Sample Matrix: Soil Sample Flags: RL-08

Semivolatile Organic	: Compounds by	GC/MS
Semirolatile Organic	. Compounds by	00,1,10

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Acenaphthylene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Acetophenone	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Aniline	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Anthracene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Benzo(a)anthracene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Benzo(a)pyrene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Benzo(b)fluoranthene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Benzo(g,h,i)perylene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Benzo(k)fluoranthene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Bis(2-chloroethoxy)methane	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Bis(2-chloroethyl)ether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Bis(2-chloroisopropyl)ether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Bis(2-Ethylhexyl)phthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
4-Bromophenylphenylether	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Butylbenzylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
4-Chloroaniline	ND	2.8	mg/Kg dry	4	V-34	SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2-Chloronaphthalene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2-Chlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Chrysene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Dibenz(a,h)anthracene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Dibenzofuran	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Di-n-butylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
1,2-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
1,3-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
1,4-Dichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
3,3-Dichlorobenzidine	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2,4-Dichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Diethylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2,4-Dimethylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
				4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Dimethylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2,4-Dinitrophenol	ND	2.8	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2,4-Dinitrotoluene	ND	1.4	mg/Kg dry			SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2,6-Dinitrotoluene	ND	1.4	mg/Kg dry	4			12/11/19	12/14/19 14:50	KLB
Di-n-octylphthalate	ND	1.4	mg/Kg dry	4		SW-846 8270D-E			
1,2-Diphenylhydrazine/Azobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Fluoranthene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	
Fluorene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Hexachlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	
Hexachlorobutadiene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	
Hexachloroethane	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	
Indeno(1,2,3-cd)pyrene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	
Isophorone	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2-Methylnaphthalene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	
								Page 32	OT 6/



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019 Field Sample #: Gp4-7 (3-5')

Sampled: 12/9/2019 11:30

Sample ID: 19L0400-07
Sample Matrix: Soil

Sample Flags: RL-08

Semivolatile	Organia	Compounds	h.,	CCME
Semivoianie	Organic	Compounds	ĐΥ	GC/IVIS

<b>-</b>			· ·						
Austor	D to-	<b>73.</b>	TT-24-	D21-42	FI/01	Master J	Date	Date/Time	A 1 4
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
2-Methylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
3/4-Methylphenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Naphthalene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Nitrobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2-Nitrophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
4-Nitrophenol	ND	2.8	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Pentachlorophenol	ND	1.4	mg/Kg dry	4	V-05	SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Phenanthrene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Phenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Pyrene	ND	0.71	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
1,2,4-Trichlorobenzene	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2,4,5-Trichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
2,4,6-Trichlorophenol	ND	1.4	mg/Kg dry	4		SW-846 8270D-E	12/11/19	12/14/19 14:50	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		54.2	30-130		-			12/14/19 14:50	
Phenol-d6		57.6	30-130					12/14/19 14:50	
Nitrobenzene-d5		50.4	30-130					12/14/19 14:50	
2-Fluorobiphenyl		59.7	30-130					12/14/19 14:50	
2,4,6-Tribromophenol		46.5	30-130					12/14/19 14:50	
p-Terphenyl-d14		61.7	30-130					12/14/19 14:50	



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-7 (3-5')

Sampled: 12/9/2019 11:30

Sample ID: 19L0400-07 Sample Matrix: Soil

Metals Analyses (Total)										
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst	
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Arsenic	16	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Barium	28	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Beryllium	0.33	0.17	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Cadmium	0.24	0.17	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Chromium	32	0.34	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Lead	28	0.51	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 12:05	CJV	
Nickel	25	0.34	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Sclenium	ND	3.4	mg/Kg dry	l		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 22:01	МЈН	
Vanadium	61	0.67	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	
Zinc	44	0.67	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:39	МЈН	



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019
Field Sample #: Gp4-7 (3-5')
Sample ID: 19L0400-07

Sampled: 12/9/2019 11:30

Sample Matrix: Soil

								Date	Date/Time		
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst	
% Solids		95.7		% Wt	1		SM 2540G	12/11/19	12/11/19 15:06	adb	



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019 Field Sample #: Gp4-9 (0-2')

Sampled: 12/9/2019 11:55

Sample ID: 19L0400-08

		Se	emivolatile Organic C	ompounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Acenaphthylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Acetophenone	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Aniline	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Benzo(a)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Benzo(a)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Benzo(b)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Benzo(g,h,i)perylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Benzo(k)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Bis(2-chloroethoxy)methane	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Bis(2-chloroethyl)ether	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Bis(2-chloroisopropyl)ether	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
4-Bromophenylphenylether	ND	0.35	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Butylbenzylphthalate	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
4-Chloroaniline	ND	0.68	mg/Kg dry	1	V-34	SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
2-Chloronaphthalene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
2-Chlorophenol	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Chrysene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Dibenz(a,h)anthracene	ND	0.17	mg/Kg dry	ı		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Dibenzofuran	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Di-n-butylphthalate	ND	0.35	mg/Kg dry	l		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
1,2-Dichlorobenzene	ND	0.35	mg/Kg dry	i		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
1,3-Dichlorobenzene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
1,4-Dichlorobenzene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
3,3-Dichlorobenzidine	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
2,4-Dichlorophenol	ND	0.35	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Diethylphthalate	ND	0.35	mg/Kg dry	ı		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
.,4-Dimethylphenol	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Dimethylphthalate	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
,4-Dinitrophenol	ND	0.68	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
,4-Dinitrotoluene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
,6-Dinitrotoluene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Di-n-octylphthalate	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
,2-Diphenylhydrazine/Azobenzene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
luoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
luorene	ND	0.17	mg/Kg dry	ı		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Iexachlorobenzene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
lexachlorobutadiene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Iexachloroethane	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
ndeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
sophorone	ND	0.35	mg/Kg dry	Í		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
-Methylnaphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB

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Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-9 (0-2')

Sampled: 12/9/2019 11:55

Sample ID: 19L0400-08
Sample Matrix: Soil

Semivolatile O	rganic)	Compounds	by	GC/MS
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							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
2-Methylphenol	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
3/4-Methylphenol	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Naphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Nitrobenzene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
2-Nitrophenol	ND	0.35	mg/Kg dry	I		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
4-Nitrophenol	ND	0.68	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Pentachlorophenol	ND	0.35	mg/Kg dry	1	V-05	SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Phenanthrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Phenol	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
1,2,4-Trichlorobenzene	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
2,4,5-Trichlorophenol	ND	0.35	mg/Kg dry	1		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
2,4,6-Trichlorophenol	ND	0.35	mg/Kg dry	ı		SW-846 8270D-E	12/11/19	12/13/19 18:24	KLB
Surrogates		% Recovery	Recovery Limits	·	Flag/Qual			***************************************	
2-Fluorophenol		70.6	30-130					12/13/19 18:24	
Phenol-d6		73.6	30-130					12/13/19 18:24	
Nitrobenzene-d5		65.8	30-130					12/13/19 18:24	
2-Fluorobiphenyl		76.7	30-130					12/13/19 18:24	
2,4,6-Tribromophenol		77.9	30-130					12/13/19 18:24	
p-Terphenyl-d14		78.6	30-130					12/13/19 18:24	



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019 Field Sample #: Gp4-9 (0-2')

Sampled: 12/9/2019 11:55

Sample ID: 19L0400-08 Samole Matrix: Soil

			Metals Analy	ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН
Arsenic	ND	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЛН
Barium	24	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЛН
Beryllium	0.21	0.17	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН
Cadmium	ND	0.17	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЛН
Chromium	8.7	0.33	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН
Lead	4.5	0.50	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	12/11/19	12/12/19 11:43	CJV
Nickel	7.5	0.33	mg/Kg dry	ı		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН
Selenium	ND	3.3	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН
Silver	ND	0.33	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 22:07	МЈН
Vanadium	22	0.67	mg/Kg dry	l		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН
Zinc	23	0.67	mg/Kg dry	1		SW-846 6010D	12/13/19	12/16/19 16:45	МЈН



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-9 (0-2')

Sampled: 12/9/2019 11:55

Sample ID: 19L0400-08
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		97.1		% Wt	1		SM 2540G	12/11/19	12/11/19 15:06	adb



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

12/14/19 3:10

Date Received: 12/10/2019

Field Sample #: Gp4-2 (6-8')

Sampled: 12/9/2019 08:40

Sample ID: 19L0400-09
Sample Matrix: Soil

Tetrachloro-m-xylene [2]

		Po	olychlorinated Biphe	enyls By GC	ÆCD				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Aroclor-1221 [1]	ND	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Aroclor-1232 [1]	ND	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Aroclor-1242 [I]	ND	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Aroclor-1248 [1]	ND	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Aroclor-1254 [2]	15	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Aroclor-1260 [1]	51	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Aroclor-1262 [1]	ND	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Aroclor-1268 [1]	ND	6.5	mg/Kg dry	200		SW-846 8082A	12/12/19	12/14/19 3:10	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		*	30-150		S-01			12/14/19 3:10	
Decachlorobiphenyl [2]		*	30-150		S-01			12/14/19 3:10	
Tetrachloro-m-xylene [1]		*	30-150		S-01			12/14/19 3:10	

S-01

30-150



Project Location: 240 Beaver St. Waltham, MA

Sample Description:

Work Order: 19L0400

Date Received: 12/10/2019

Field Sample #: Gp4-2 (6-8')

Sampled: 12/9/2019 08:40

Sample ID: 19L0400-09
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		61.7		% Wt	1		SM 2540G	12/11/19	12/11/19 15:06	adb



## Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
19L0400-01 [Gp4-1 (3-5')]	B248096	12/11/19
19L0400-02 [Gp4-2 (4-6')]	B248096	12/11/19
19L0400-03 [Gp4-3 (4-6')]	B248096	12/11/19
19L0400-04 [Gp4-4 (3-5')]	B248096	12/11/19
19L0400-05 [Gp4-5 (6-8')]	B248096	12/11/19
19L0400-06 [Gp4-6 (3-5')]	B248096	12/11/19
19L0400-07 [Gp4-7 (3-5')]	B248096	12/11/19
19L0400-08 [Gp4-9 (0-2')]	B248096	12/11/19
19L0400-09 [Gp4-2 (6-8')]	B248096	12/11/19

Prep Method: SW-846 3050B-SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19L0400-01 [Gp4-1 (3-5')]	B248351	1.51	50.0	12/13/19	
19L0400-02 [Gp4-2 (4-6')]	B248351	1.55	50.0	12/13/19	
19L0400-03 [Gp4-3 (4-6')]	B248351	1.52	50.0	12/13/19	
19L0400-04 [Gp4-4 (3-5')]	B248351	1.51	50.0	12/13/19	
19L0400-05 [Gp4-5 (6-8')]	B248351	1.52	50.0	12/13/19	
19L0400-06 [Gp4-6 (3-5')]	B248351	1.56	50.0	12/13/19	
'9L0400-07 [Gp4-7 (3-5')]	B248351	1.55	50.0	12/13/19	
_0400-08 [Gp4-9 (0-2')]	B248351	1.54	50.0	12/13/19	

Prep Method: SW-846 7471-SW-846 7471B

Batch	Initial [g]	Final [mL]	Date	
B248100	0.598	50.0	12/11/19	
B248100	0.592	50.0	12/11/19	
B248100	0.606	50.0	12/11/19	
B248100	0.591	50.0	12/11/19	
B248100	0.624	50.0	12/11/19	
B248100	0.591	50.0	12/11/19	
B248100	0.614	50.0	12/11/19	
B248100	0.605	50.0	12/11/19	
	B248100 B248100 B248100 B248100 B248100 B248100	B248100 0.598 B248100 0.592 B248100 0.606 B248100 0.591 B248100 0.591 B248100 0.591 B248100 0.614	B248100       0.598       50.0         B248100       0.592       50.0         B248100       0.606       50.0         B248100       0.591       50.0         B248100       0.624       50.0         B248100       0.591       50.0         B248100       0.591       50.0         B248100       0.614       50.0	B248100 0.598 50.0 12/11/19 B248100 0.592 50.0 12/11/19 B248100 0.606 50.0 12/11/19 B248100 0.591 50.0 12/11/19 B248100 0.624 50.0 12/11/19 B248100 0.591 50.0 12/11/19 B248100 0.591 50.0 12/11/19 B248100 0.614 50.0 12/11/19

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19L0400-09 [Gp4-2 (6-8')]	B248210	10.0	10.0	12/12/19

Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date		
19L0400-01 [Gp4-1 (3-5')]	B248158	30.2	1.00	12/11/19		
19L0400-02 [Gp4-2 (4-6')]	B248158	30.0	1.00	12/11/19		
1,0400-03 [Gp4-3 (4-6')]	B248158	30.7	1.00	12/11/19		
L0400-04 [Gp4-4 (3-5')]	B248158	30.5	1.00	12/11/19		
19L0400-05 [Gp4-5 (6-8')]	B248158	30.5	1.00	12/11/19		
19L0400-06 [Gp4-6 (3-5')]	B248158	30.4	1.00	12/11/19		
19L0400-07 [Gp4-7 (3-5')]	B248158	30.0	1.00	12/11/19		
9L0400-08 [Gp4-9 (0-2')]	B248158	30.2	1.00	12/11/19		



Sample Extraction Data



## 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 **QUALITY CONTROL**

## Semivolatile Organic Compounds by GC/MS - Quality Control

Analysis	D14	Reporting	Y ()	Spike	Source	0/BEC	%REC Limits	חחת	RPD	N
Analyte	Result	Limit U	Units	Level	Result	%REC		RPD	Limit	Notes
atch B248158 - SW-846 3546						····				
lank (B248158-BLK1)				Prepared: 12	/11/19 Analy	zed: 12/12/1	9			
cenaphthene	ND	0.17	mg/Kg wet							
cenaphthylene	ND	0.17	mg/Kg wet							
cetophenone	ND	0.34	mg/Kg wet							
niline	ND	0.34	mg/Kg wet							
nthracene	ND	0.17	mg/Kg wet							
enzo(a)anthracene	ND	0.17	mg/Kg wet							
enzo(a)pyrene enzo(b)fluoranthene	ND	0.17	mg/Kg wet							
enzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
enzo(k)fluoranthene	ND	0.17 0.17	mg/Kg wet mg/Kg wet							
is(2-chloroethoxy)methane	ND	0.17	mg/Kg wet							
is(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
is(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
is(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
Bromophenylphenylether	ND ND	0.34	mg/Kg wet							
utylbenzylphthalate	ND ND	0.34	mg/Kg wet							
Chloroaniline	ND	0.65	mg/Kg wet							
Chloronaphthaiene	ND ND	0.34	mg/Kg wet							
Chlorophenol	ND	0.34	mg/Kg wet							
hrysene	ND	0.17	mg/Kg wet							
ibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
benzofuran	ND	0.34	mg/Kg wet							
i-n-butylphthalate	ND	0.34	mg/Kg wet							
2-Dichlorobenzene	ND	0.34	mg/Kg wet							
3-Dichlorobenzene	ND	0.34	mg/Kg wet							
4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
4-Dichlorophenol	ND	0.34	mg/Kg wet							
iethylphthalate	ND	0.34	mg/Kg wet							
4-Dimethylphenol	ND	0.34	mg/Kg wet							
imethylphthalate	ND	0.34	mg/Kg wet							
4-Dinitrophenol	ND	0.65	mg/Kg wet							
4-Dinitrotoluene	ND	0.34	mg/Kg wet							
5-Dinitrotoluene	ND	0.34	mg/Kg wet							
-n-octylphthalate	ND	0.34	mg/Kg wet							
2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
uoranthene	ND	0.17	mg/Kg wet							
uorene	ND	0.17	mg/Kg wet							
exachlorobenzene	ND	0.34	mg/Kg wet							
exachlorobutadiene	ND	0.34	mg/Kg wet							
exachloroethane	ND	0.34	mg/Kg wet							
leno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
phorone	ND	0.34	mg/Kg wet							
Methylnaphthalene	ND	0.17	mg/Kg wet							
Methylphenol  Methylphenol	ND	0.34	mg/Kg wet							
-Methylphenol	ND	0.34	mg/Kg wet							
ohthalene	ND	0.17	mg/Kg wet							
robenzene	ND	0.34	mg/Kg wet							
Nitrophenol	ND	0.34	mg/Kg wet							
Nitrophenol	ND	0.65	mg/Kg wet							
ntachlorophenol enanthrene	ND	0.34 0.17	mg/Kg wet mg/Kg wet							



### QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248158 - SW-846 3546										. 10103
Blank (B248158-BLK1)				Prepared: 12	2/11/19 Analy	/zed: 12/12/1	9			
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							V-05
Pyridine	ND	0.34	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	5.18		mg/Kg wet	6.60		78.5	30-130			~
Surrogate: Phenol-d6	5.21		mg/Kg wet	6.60		79.0	30-130			
Surrogate: Nitrobenzene-d5	2.38		mg/Kg wet	3.30		72.2	30-130			
Surrogate: 2-Fluorobiphenyl	2.99		mg/Kg wet	3.30		90.6	30-130			
Surrogate: 2,4,6-Tribromophenol	4.45		mg/Kg wet	6.60		67.4	30-130			
Surrogate: p-Terphenyl-d14	2.40		mg/Kg wet	3.30		72.8	30-130			
	2.70									
LCS (B248158-BS1)					/11/19 Analy					A-1-2-
Acenaphthene	1.18	0.17	mg/Kg wet	1.63		72.6	40-140			
Acenaphthylene	1.24	0.17	mg/Kg wet	1.63		76.2	40-140			
Acetophenone	1.19	0.33	mg/Kg wet	1.63		73.1	40-140			
Aniline	0.814	0.33	mg/Kg wet	1.63		50.0	40-140			
Anthracene	1.29	0.17	mg/Kg wet	1.63		79.1	40-140			
Senzo(a)anthracene	1.28	0.17	mg/Kg wet	1.63		78.7	40-140			
nzo(a)pyrene	1.20	0.17	mg/Kg wet	1.63		73.9	40-140			
Benzo(b)fluoranthene	1.21	0.17	mg/Kg wet	1.63		74.2	40-140			
Senzo(g,h,i)perylene	1.20	0.17	mg/Kg wet	1.63		73.9	40-140			
Benzo(k)fluoranthene	1.24	0.17	mg/Kg wet	1.63		75.9	40-140			
Bis(2-chloroethoxy)methane	1.24	0.33	mg/Kg wet	1.63		75.9	40-140			
Bis(2-chloroethyl)ether	1.16	0.33	mg/Kg wet	1.63		71.5	40-140			
Bis(2-chloroisopropyl)ether	1.33	0.33	mg/Kg wet	1.63		81.8	40-140			
Bis(2-Ethylhexyl)phthalate	1,27	0.33	mg/Kg wet	1.63		78.2	40-140			
-Bromophenylphenylether	1.30	0.33	mg/Kg wet	1.63		79.5	40-140			
Butylbenzylphthalate	1.31	0.33	mg/Kg wet	1.63		80.6	40-140			
-Chloroaniline	0.991	0.64	mg/Kg wet	1.63		60.8	15-140			
-Chloronaphthalene	1.05	0.33	mg/Kg wet	1.63		64.3	40-140			
-Chlorophenol	1.17	0.33	mg/Kg wet	1.63		72.1	30-130			
Chrysene	1.21	0.17	mg/Kg wet	1.63		74.2	40-140			
Pibenz(a,h)anthracene	1.15	0.17	mg/Kg wet	1.63		70.5	40-140			
Pibenzofuran	1.28	0.33	mg/Kg wet	1.63		78.3	40-140			
i-n-butylphthalate	1.24	0.33	mg/Kg wet	1.63		76.3	40-140			
2-Dichlorobenzene	1.07	0.33	mg/Kg wet	1.63		65.6	40-140			
,3-Dichlorobenzene	1.06	0.33	mg/Kg wet	1.63		64.9	40-140			
4-Dichlorobenzene	1.07	0.33	mg/Kg wet	1.63		65.7	40-140			
3-Dichlorobenzidine	1.07	0.17	mg/Kg wet	1.63		66.0	40-140			
4-Dichlorophenol	1.25	0.33	mg/Kg wet	1.63		76.7	30-130			
iethylphthalate	1.23	0.33	mg/Kg wet	1.63		75.3	40-140			
4-Dimethylphenol	1.26	0.33	mg/Kg wet	1.63		77.4	30-130			
imethylphthalate	1.26	0.33	mg/Kg wet	1.63		77.3	40-140			
4-Dinitrophenol	0.420	0.64	mg/Kg wet	1.63		25.8	15-140			
4-Dinitrotoluene	1.22	0.33	mg/Kg wet	1.63		74.8	40-140			
6-Dinitrotoluene	1.33	0.33	mg/Kg wet	1.63		82.0	40-140			
n-octylphthalate	1.31	0.33	mg/Kg wet	1.63		80.3	40-140			
2-Diphenylhydrazine/Azobenzene	1.27	0.33	mg/Kg wet	1.63		77.8	40-140			
luoranthene		0.17	mg/Kg wet				40-140			
luorene	1.23 1.23	0.17	mg/Kg wet	1.63 1.63		75.8 75.7	40-140 40-140			



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B248158 - SW-846 3546											
LCS (B248158-BS1)				Prepared: 12	2/11/19 Analy	zed: 12/12/1	9				
Hexachlorobenzene	1.27	0.33	mg/Kg wet	1.63	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	77.9	40-140				
Hexachlorobutadiene	1.10	0.33	mg/Kg wet	1.63		67.7	40-140				
Hexachloroethane	1.06	0.33	mg/Kg wet	1.63		65.1	40-140				
Indeno(1,2,3-cd)pyrene	1.25	0.17	mg/Kg wet	1.63		76.5	40-140				
Isophorone	1.23	0.33	mg/Kg wet	1.63		75.8	40-140				
2-Methylnaphthalene	1.32	0.17	mg/Kg wet	1.63		80.9	40-140				
2-Methylphenol	1.15	0.33	mg/Kg wet	1.63		70.8	30-130				
3/4-Methylphenol	1.23	0.33	mg/Kg wet	1.63		75.6	30-130				
Naphthalene	1.17	0.17	mg/Kg wet	1.63		71.7	40-140				
Nitrobenzene	1.12	0.33	mg/Kg wet	1.63		68.7	40-140				
2-Nitrophenol	1.18	0.33	mg/Kg wet	1.63		72.6	30-130				
4-Nitrophenol	1,11	0.64	mg/Kg wet	1.63		68.4	15-140				ţ
Pentachlorophenol	0.955	0.33	mg/Kg wet	1.63		58.6	30-130				
Phenanthrene	1.29	0.17	mg/Kg wet	1.63		79.4	40-140				
Phenol	1.17	0.33	mg/Kg wet	1.63		71.5	15-140				†
Pyrene	1.18	0.17	mg/Kg wet	1.63		72.3	40-140			V-05	
Pyridine	0.716	0.33	mg/Kg wet	1.63		43.9	30-140				†
1,2,4-Trichlorobenzene	1.14	0.33	mg/Kg wet	1.63		70.2	40-140				
,5-Trichlorophenol	1.25	0.33	mg/Kg wet	1.63		76.6	30-130				
.,4,6-Trichlorophenol	1.25	0.33	mg/Kg wet	1.63		77.0	30-130				
Surrogate: 2-Fluorophenol	5.08	** ********	mg/Kg wet	6.51		78.0	30-130				—
Surrogate: Phenol-d6	5.04		mg/Kg wet	6.51		77.4	30-130				
Surrogate: Nitrobenzene-d5	2.44		mg/Kg wet	3.26		74.9	30-130				
Surrogate: 2-Fluorobiphenyl	3.11		mg/Kg wet	3.26		95.4	30-130				
Surrogate: 2,4,6-Tribromophenol	5.37		mg/Kg wet	6.51		82.4	30-130				
Surrogate: p-Terphenyl-d14	2.63		mg/Kg wet	3.26		80.8	30-130				
LCS Dup (B248158-BSD1)				Prepared: 12	1/11/19 Analy	zed: 12/12/1	9				
Acenaphthene	1.18	0.17	mg/Kg wet	1.66	, 11, 15 141419	71.6	40-140	0.144	30		_
Acenaphthylene	1.25	0.17	mg/Kg wet	1.66		75.7	40-140	0.878	30		
Acetophenone	1.23	0.34	mg/Kg wet	1.66		74.5	40-140	3.59	30		
Aniline	0.841	0.34	mg/Kg wet	1.66		50.8	40-140	3.35	30		
Anthracene	1.30	0.17	mg/Kg wet	1.66		78.3	40-140	0.574	30		
Benzo(a)anthracene	1.31	0.17	mg/Kg wet	1.66		78.9	40-140	1.87	30		
Benzo(a)pyrene	1.25	0.17	mg/Kg wet	1.66		75.6	40-140	3.89	30		
Benzo(b)fluoranthene	1.26	0.17	mg/Kg wet	1.66		76.1	40-140	4.12	30		
Benzo(g,h,i)perylene	1.19	0.17	mg/Kg wet	1.66		71.7	40-140	1.46	30		
Benzo(k)fluoranthene	1.30	0.17	mg/Kg wet	1.66		78.6	40-140	5.14	30		
Bis(2-chloroethoxy)methane	1.30	0.34	mg/Kg wet	1.66		78.8	40-140	5.31	30		
Bis(2-chloroethyl)ether	1.22	0.34	mg/Kg wet	1.66		73.8	40-140	4.92	30		
Bis(2-chloroisopropyl)ether	1.39	0.34	mg/Kg wet	1.66		83.8	40-140	4.03	30		
Bis(2-Ethylhexyl)phthalate	1.37	0.34	mg/Kg wet	1.66		82.6	40-140	7.14	30		
4-Bromophenylphenylether		0.34	mg/Kg wet	1.66		77.0	40-140	1.55	30		
Butylbenzylphthalate	1.28 1.29	0.34	mg/Kg wet	1.66		77.8	40-140	1.97	30		
4-Chloroaniline		0.66	mg/Kg wet	1.66		62.7	15-140	4.59	30		t
2-Chloronaphthalene	1.04	0.34	mg/Kg wet	1.66		65.6	40-140	3.55	30		,
`Chlorophenol	1.09 1.23	0.34	mg/Kg wet	1.66		74.6	30-130	4.97	30		
rysene		0.17	mg/Kg wet	1.66		78.7	40-140	7.52	30		
Dibenz(a,h)anthracene	1.30	0.17	mg/Kg wet	1.66		70.1	40-140	0.959	30		
* * *	1.16	0.17	mg/Kg wet	1.66		78.1	40-140	1.36	30		
Disenzofuran Di a hutulahthalata	1.29	0.34	mg/Kg wet	1.66		78.1 78.4	40-140	4.36	30		
Di-n-butylphthalate	1.30	0.34	mg/Kg wet			67.8	40-140	4.94	30		
1,2-Dichlorobenzene	1.12	0.34	mg/rg wet	1.66		07.0	70-170	7.77	JU		



### QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B248158 - SW-846 3546											
LCS Dup (B248158-BSD1)				Prepared: 12	2/11/19 Analy	zed: 12/12/	19				
1,3-Dichlorobenzene	1.09	0.34	mg/Kg wet	1.66		65.7	40-140	2.87	30		
1,4-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.66		67.3	40-140	4.08	30		
3,3-Dichlorobenzidine	1.05	0.17	mg/Kg wet	1.66		63.7	40-140	1.88	30		
2,4-Dichlorophenol	1.28	0.34	mg/Kg wet	1.66		77.2	30-130	2.29	30		
Diethylphthalate	1.25	0.34	mg/Kg wet	1.66		75.4	40-140	1.83	30		
2,4-Dimethylphenol	1.30	0.34	mg/Kg wet	1.66		78.6	30-130	3.18	30		
Dimethylphthalate	1.25	0.34	mg/Kg wet	1.66		75.3	40-140	0.980	30		
2,4-Dinitrophenol	0.430	0.66	mg/Kg wet	1.66		26.0	15-140	2.41	30		†
2,4-Dinitrotoluene	1.29	0.34	mg/Kg wet	1.66		77.8	40-140	5.52	30		
2,6-Dinitrotoluene	1.32	0.34	mg/Kg wet	1.66		79.9	40-140	0.853	30		
Di-n-octylphthalate	1.40	0.34	mg/Kg wet	1.66		84.6	40-140	6.88	30		
1,2-Diphenylhydrazine/Azobenzene	1.30	0.34	mg/Kg wet	1.66		78.6	40-140	2.72	30		
Fluoranthene	1.30	0.17	mg/Kg wet	1.66		78.3	40-140	4.86	30		
Fluorene	1.28	0.17	mg/Kg wet	1.66		77.6	40-140	4.07	30		
Hexachlorobenzene	1.26	0.34	mg/Kg wet	1.66		76.0	40-140	0.854	30		
Hexachlorobutadiene	1.16	0.34	mg/Kg wet	1.66		70.1	40-140	5.10	30		
Hexachloroethane	1.09	0.34	mg/Kg wet	1.66		66.0	40-140	2.95	30		
Indeno(1,2,3-cd)pyrene	1.25	0.17	mg/Kg wet	1.66		75.6	40-140	0.406	30		
Isophorone	1.32	0.34	mg/Kg wet	1.66		79.4	40-140	6.30	30		
Methylnaphthalene	1.41	0.17	mg/Kg wet	1.66		85.0	40-140	6.56	30		
Methylphenol	1.23	0.34	mg/Kg wet	1.66		74.3	30-130	6.44	30		
3/4-Methylphenol	1.29	0.34	mg/Kg wet	1.66	•	77.9	30-130	4.74	30		
Naphthalene	1.23	0.17	mg/Kg wet	1.66		74.3	40-140	5.15	30		
Nitrobenzene	1.22	0.34	mg/Kg wet	1.66		73.7	40-140	8.72	30		
2-Nitrophenol	1.26	0.34	mg/Kg wet	1.66		76.4	30-130	6.77	30		
4-Nitrophenol	1.18	0.66	mg/Kg wet	1.66		71.4	15-140	5.88	30		†
Pentachlorophenol	0.962	0.34	mg/Kg wet	1.66		58.1	30-130	0.751	30		
Phenanthrene	1.31	0.17	mg/Kg wet	1.66		79.4	40-140	1.67	30		
Phenol	1.21	0.34	mg/Kg wet	1.66		73.0	15-140	3.66	30		†
Pyrene	1.19	0.17	mg/Kg wet	1.66		71.8	40-140	0.976	30	V-05	
Pyridine	0.733	0.34	mg/Kg wet	1.66		44.3	30-140	2.46	30		ţ
1,2,4-Trichlorobenzene 2,4,5-Trichlorophenol	1.20	0.34	mg/Kg wet	1.66		72.8	40-140	5.17	30		
2,4,6-Trichlorophenol	1.28	0.34 0.34	mg/Kg wet mg/Kg wet	1.66		77.2	30-130	2.37 3.26	30 30		
	1.21	0.34	<del></del>	1.66		73.3	30-130	3.20	30		
Surrogate: 2-Fluorophenol	5.17		mg/Kg wet	6.62		78.0	30-130				
Surrogate: Phenol-d6	5.20		mg/Kg wet	6.62		78.5	30-130				
Surrogate: Nitrobenzene-d5 Surrogate: 2-Fluorobiphenyl	2.52 2.98		mg/Kg wet	3.31		76.1	30-130				
Surrogate: 2,4,6-Tribromophenol	5.40		mg/Kg wet mg/Kg wet	3.31 6.62		90.0 81.5	30-130 30-130				
Surrogate: p-Terphenyl-d14	2.59		mg/Kg wet	3.31		78.1	30-130				
Matrix Spike (B248158-MS1)	Som	ce: 19L0400-			/11/19 Analy	zed: 12/12/1	9				
Acenaphthene	0.804	0.36	mg/Kg dry	1.76	ND		40-140				
Acenaphthylene	0.809	0.36	mg/Kg dry	1.76	ND	45.9	40-140				
Acetophenone	0.828	0.72	mg/Kg dry	1.76	ND	47.0	40-140				
Aniline	0.540	0.72	mg/Kg dry	1.76	ND	30.6 *	40-140			MS-09	
Anthracene	0.870	0.36	mg/Kg dry	1.76	ND	49.4	40-140				
Benzo(a)anthracene	0.897	0.36	mg/Kg dry	1.76	ND	50.9	40-140				
ızo(a)pyrene	0.870	0.36	mg/Kg dry	1.76	· ND	49.4	40-140				
zenzo(b)fluoranthene	0.935	0.36	mg/Kg dry	1.76	ND	53.1	40-140				
Benzo(g,h,i)perylene	0.797	0.36	mg/Kg dry	1.76	ND	45.3	40-140				
Benzo(k)fluoranthene	0.830	0.36	mg/Kg dry	1.76	ND	47.1	40-140				



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248158 - SW-846 3546										
Aatrix Spike (B248158-MS1)	Sour	rce: 19L0400	-01	Prepared: 12	/11/19 Analy:	zed: 12/12/	19			
lis(2-chloroethoxy)methane	0.892	0.72	mg/Kg dry	1.76	ND	50.7	40-140			
Sis(2-chloroethyl)ether	0.858	0.72	mg/Kg dry	1.76	ND	48.7	40-140			
sis(2-chloroisopropyl)ether	0.958	0.72	mg/Kg dry	1.76	ND	54.4	40-140			
sis(2-Ethylhexyl)phthalate	1.04	0.72	mg/Kg dry	1.76	ND	59.2	40-140			
-Bromophenylphenylether	0.783	0.72	mg/Kg dry	1.76	ND	44.4	40-140			
iutylbenzylphthalate	0.903	0.72	mg/Kg dry	1.76	ND	51.3	40-140			
-Chloroaniline	0.628	1.4	mg/Kg dry	1.76	ND	35.6	40-140			MS-09
-Chloronaphthalene	0.677	0.72	mg/Kg dry	1.76	ND	38.4 *	40-140			MS-22
-Chlorophenol	0.802	0.72	mg/Kg dry	1.76	ND	45.5	30-130			
hrysene	0.915	0.36	mg/Kg dry	1.76	ND	52.0	40-140			
ibenz(a,h)anthracene	0.729	0.36	mg/Kg dry	1.76	ND	41.4	40-140			
ibenzofuran	0.858	0.72	mg/Kg dry	1.76	ND	48.7	40-140			
i-n-butylphthalate	0.896	0.72	mg/Kg dry	1.76	ND	50.9	40-140			
2-Dichlorobenzene	0.725	0.72	mg/Kg dry	1.76	ND	41.2	40-140			
3-Dichlorobenzene	0.704	0.72	mg/Kg dry	1.76	ND	40.0	40-140			
4-Dichlorobenzene	0.699	0.72	mg/Kg dry	1.76	ND	39.7 *				MS-22
3-Dichlorobenzidine	0.251	0.36	mg/Kg dry	1.76	ND	14.2 *				MS-09
4-Dichlorophenol	0.857	0.72	mg/Kg dry	1.76	ND	48.6	30-130			
ethylphthalate	0.921	0.72	mg/Kg dry	1.76	ND	52.3	40-140			
4-Dimethylphenol	0.850	0.72	mg/Kg dry	1.76	ND	48.3	30-130			
imethylphthalate	0.859	0.72	mg/Kg dry	1.76	ND	48.8	40-140			
4-Dinitrophenol	0.710	1.4	mg/Kg dry	1.76	ND	40.3	30-130			
4-Dinitrotoluene	0.812	0.72	mg/Kg dry	1.76	ND	46.1	40-140			
6-Dinitrotoluene	0.859	0.72	mg/Kg dry	1.76	ND	48.8	40-140			
i-n-octylphthalate	1.11	0.72	mg/Kg dry	1.76	ND	63.0	40-140			
2-Diphenylhydrazine/Azobenzene	0.839	0.72	mg/Kg dry	1.76	ND	47.6	40-140			
uoranthene	1.03	0.36	mg/Kg dry	1.76	ND	58.8	40-140			
uorene	0.870	0.36	mg/Kg dry	1.76	ND	49.4	40-140			
exachlorobenzene	0.684	0.72	mg/Kg dry	1.76	ND	38.8 *				MS-22
exachlorobutadiene	0.752	0.72	mg/Kg dry	1.76	ND	42.7	40-140			
exachloroethane	0.686	0.72	mg/Kg dry	1.76	ND	39.0 *				MS-09
deno(1,2,3-cd)рутепе	0.842	0.36	mg/Kg dry	1.76	ND	47.8	40-140			
ophorone	0.905	0.72	mg/Kg dry	1.76	ND	51.4	40-140			
Methylnaphthalene Methylphonol	0.931	0.36	mg/Kg dry	1.76	ND	52.8	40-140			
Methylphenol	0.854	0.72	mg/Kg dry	1.76	ND	48.5	30-130			
4-Methylphenol	0.861	0.72	mg/Kg dry	1.76	ND	48.9	30-130			
aphthalene trobenzene	0.817	0.36	mg/Kg dry	1.76	ND	46.4	40-140			
rrobenzene Nitrophenol	0.840	0.72	mg/Kg dry	1.76	ND	47.7	40-140			
Nitrophenol	0.797	0.72	mg/Kg dry	1.76	ND	45.3	30-130			
ntachlorophenol	0.919	1.4 0.72	mg/Kg dry	1.76	ND	52.2	30-130			
ntachtorophenot enanthrene	0.528	0.72	mg/Kg dry	1.76	ND	30.0	30-130			
enantnrene enol	0.968	0.36	mg/Kg dry	1.76	ND	55.0	40-140			
rene	0.830	0.72	mg/Kg dry mg/Kg dry	1.76	ND 0.343	47.2	30-130			3700
,4-Trichlorobenzene	0.980	0.36 0.72		1.76	0.242	41.9	40-140			V-05
,,4-Trichlorophenol	0.778	0.72	mg/Kg dry mg/Kg dry	1.76	ND	44.2	40-140			
,6-Trichlorophenoi	0.814 0.810	0.72	mg/Kg dry	1.76 1.76	ND ND	46.2 46.0	30-130 30-130			
		·····			עע					
rogate: 2-Fluorophenol rogate: Phenol-d6	3.62 3.65		mg/Kg dry	7.04		51.4	30-130			
rrogate: Pnenoi-do rrogate: Nitrobenzene-d5	3.65		mg/Kg dry	7.04		51.8	30-130			
rrogate: Nitropenzene-do rrogate: 2-Fluorobiphenyl	1.71 2.07		mg/Kg dry	3.52 3.52		48.7 58.8	30-130 30-130			
rrogate: 2-Filiorooiphenyi	3.32		mg/Kg dry mg/Kg dry	3.52 7.04		47.2	30-130 30-130			



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	Result	- Limit		20,01	227411					
Batch B248158 - SW-846 3546										****
Matrix Spike (B248158-MS1)	Sour	ce: 19L0400	-01	Prepared: 12	2/11/19 Analy2	ed: 12/12/1	9			
Surrogate: p-Terphenyl-d14	1.73		mg/Kg dry	3.52		49.1	30-130			
Matrix Spike Dup (B248158-MSD1)	Sour	ce: 19L0400	-01	Prepared: 12	2/11/19 Analyz	ed: 12/12/1	9			
Acenaphthene	0.859	0.36	mg/Kg dry	1.76	ND	49.0	40-140	6.69	30	
Acenaphthylene	0.872	0.36	mg/Kg dry	1.76	ND	49.7	40-140	7.53	30	
Acetophenone	0.911	0.72	mg/Kg dry	1.76	ND	51.9	40-140	9.53	30	
Aniline	0.517	0.72	mg/Kg dry	1.76	ND	29.5 *	40-140	4.19	30	MS-09
Anthracene	0.917	0.36	mg/Kg dry	1.76	ND	52.2	40-140	5.26	30	
Benzo(a)anthracene	0.995	0.36	mg/Kg dry	1.76	ND	56.7	40-140	10.4	30	
Benzo(a)pyrene	0.961	0.36	mg/Kg dry	1.76	ND	54.8	40-140	9.96	30	
Benzo(b)fluoranthene	1.04	0.36	mg/Kg dry	1.76	ND	59.3	40-140	10.7	30	
Benzo(g,h,i)perylene	0.775	0.36	mg/Kg dry	1.76	ND	44.2	40-140	2.84	30	
Benzo(k)fluoranthene	0.894	0.36	mg/Kg dry	1.76	ND	51.0	40-140	7.50 6.16	30 30	
Bis(2-chloroethoxy)methane	0.949	0.72	mg/Kg dry	1.76	ND	54.1	40-140	6.16	30	
Bis(2-chloroethyl)ether Bis(2-chloroisopropyl)ether	0.925	0.72 0.72	mg/Kg dry mg/Kg dry	1.76	ND	52.7 59.2	40-140 40-140	7.56 8.05	30 30	
Bis(2-Ethylhexyl)phthalate	1.04	0.72	mg/Kg dry	1.76	ND	63.8	40-140	7.28	30	
	1.12	0.72	mg/Kg dry	1.76	ND	47.3	40-140	7.26 5.86	30	
4-Bromophenylphenylether tylbenzylphthalate	0.830	0.72	mg/Kg dry	1.76 1.76	ND ND	53.8	40-140	4.46	30	
-Chloroaniline	0.944	1.4	mg/Kg dry	1.76	ND	37.6 *	40-140	5.13	30	MS-09
2-Chloronaphthalene	0.661	0.72	mg/Kg dry	1.76	ND	42.2	40-140	8.90	30	1713-07
2-Chlorophenoi	0.740 0.891	0.72	mg/Kg dry	1.76	ND	50.8	30-130	10.6	30	
Chrysene	1.00	0.36	mg/Kg dry	1.76	ND	57.0	40-140	8.99	30	
Dibenz(a,h)anthracene	0.717	0.36	mg/Kg dry	1.76	ND	40.8	40-140	1.69	30	
Dibenzofuran	0.918	0.72	mg/Kg dry	1.76	ND	52.3	40-140	6.72	30	
Di-n-butylphthalate	0.918	0.72	mg/Kg dry	1.76	ND	54.2	40-140	5.99	30	
1,2-Dichlorobenzene	0.805	0.72	mg/Kg dry	1.76	ND	45.9	40-140	10.5	30	
1,3-Dichlorobenzene	0.779	0.72	mg/Kg dry	1.76	ND	44.4	40-140	10.0	30	
1,4-Dichlorobenzene	0.802	0.72	mg/Kg dry	1.76	ND	45.7	40-140	13.7	30	
3,3-Dichlorobenzidine	0.234	0.36	mg/Kg dry	1.76	ND	13.3 *	40-140		30	MS-09
2,4-Dichlorophenol	0.919	0.72	mg/Kg dry	1.76	ND	52.4	30-130	7.04	30	
Diethylphthalate	0.946	0.72	mg/Kg dry	1.76	ND	53.9	40-140	2.76	30	
2,4-Dimethylphenol	0.904	0.72	mg/Kg dry	1.76	ND	51.5	30-130	6.08	30	
Dimethylphthalate	0.913	0.72	mg/Kg dry	1.76	ND	52.0	40-140	6.02	30	
2,4-Dinitrophenol	0.697	1.4	mg/Kg dry	1.76	ND	39.7	30-130		30	
2,4-Dinitrotoluene	0.871	0.72	mg/Kg dry	1.76	ND	49.6	40-140	7.02	30	
2,6-Dinitrotoluene	0.939	0.72	mg/Kg dry	1.76	ND	53.5	40-140	8.98	30	
Di-n-octylphthalate	1.08	0.72	mg/Kg dry	1.76	ND	61.7	40-140	2.39	30	
1,2-Diphenylhydrazine/Azobenzene	0.866	0.72	mg/Kg dry	1.76	ND	49.3	40-140	3.13	30	
Fluoranthene	1.21	0.36	mg/Kg dry	1.76	ND	69.0	40-140	15.6	30	
Fluorene	0.939	0.36	mg/Kg dry	1.76	ND	53.5	40-140	7.60	30	
Hexachlorobenzene	0.739	0.72	mg/Kg dry	1.76	ND	42.1	40-140	7.68	30	
Hexachlorobutadiene	0.809	0.72	mg/Kg dry	1.76	ND	46.1	40-140	7.42	30	
Hexachloroethane	0.698	0.72	mg/Kg dry	1.76	ND	39.8 *	40-140	1.70	30	MS-09
Indeno(1,2,3-cd)pyrene	0.848	0.36	mg/Kg dry	1.76	ND	48.3	40-140	0.667	30	
Isophorone	0.981	0.72	mg/Kg dry	1.76	ND	55.9	40-140	8.02	30	
Methylnaphthalene	0.996	0.36	mg/Kg dry	1.76	ND	56.8	40-140	6.82	30	
Methylphenol	0.916	0.72	mg/Kg dry	1.76	ND	52.2	30-130	7.06	30	
3/4-Methylphenol	0.954	0.72	mg/Kg dry	1.76	ND	54.4	30-130	10.2	30	
Naphthalene	0.905	0.36	mg/Kg dry	1.76	ND	51.6	40-140	10.2	30	
Nitrobenzene	0.899	0.72	mg/Kg dry	1.76	ND	51.2	40-140	6.87	30	
2-Nitrophenol	0.850	0.72	mg/Kg dry	1.76	ND	48.4	30-130	6.41	30	



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248158 - SW-846 3546										
Matrix Spike Dup (B248158-MSD1)	Sou	rce: 19L0400	-01	Prepared: 12	2/11/19 Analy:	zed: 12/12/	19			
4-Nitrophenol	0.931	1.4	mg/Kg dry	1.76	ND	53.0	30-130	1.26	30	
Pentachlorophenol	0.713	0.72	mg/Kg dry	1.76	ND	40.6	30-130	29.8	30	
Phenanthrene	1.06	0.36	mg/Kg dry	1.76	ND	60.6	40-140	9.43	30	
Phenol	0.881	0.72	mg/Kg dry	1.76	ND	50.2	30-130	5.91	30	
Pyrene	1.13	0.36	mg/Kg dry	1.76	0.242	50.9	40-140	14.6	30	V-05
1,2,4-Trichlorobenzene	0.828	0.72	mg/Kg dry	1.76	ND	47.2	40-140	6.15	30	
2,4,5-Trichlorophenol	0.848	0.72	mg/Kg dry	1.76	ND	48.3	30-130	4.07	30	
2,4,6-Trichlorophenol	0.825	0.72	mg/Kg dry	1.76	ND	47.0	30-130	1.82	30	
Surrogate: 2-Fluorophenol	3.99		mg/Kg dry	7.02		56.9	30-130			
Surrogate: Phenol-d6	3,93		mg/Kg dry	7.02		55.9	30-130			
Surrogate: Nitrobenzene-d5	1.85		mg/Kg dry	3.51		52.7	30-130			
Surrogate: 2-Fluorobiphenyl	2.18		mg/Kg dry	3.51		62.1	30-130			
Surrogate: 2,4,6-Tribromophenol	3.82		mg/Kg dry	7.02		54.5	30-130			
Surrogate: p-Terphenyl-d14	1.89		mg/Kg dry	3.51		53.9	30-130			



### Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248210 - SW-846 3546										
Blank (B248210-BLK1)				Prepared: 12	2/12/19 Anal	yzed: 12/13/	19			
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Arocior-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
aroclor-1262	ND	0.020	mg/Kg wet							
aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
rrogate: Decachlorobiphenyl	0.134		mg/Kg wet	0.200		66.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.121		mg/Kg wet	0.200		60.6	30-150			
surrogate: Tetrachloro-m-xylene	0.126		mg/Kg wet	0.200		63.1	30-150			
urrogate: Tetrachloro-m-xylene [2C]	0.127		mg/Kg wet	0.200		63.5	30-150			
.CS (B248210-BS1)				Prepared: 12	2/12/19 Anal	yzed: 12/13/	19			
Aroclor-1016	0.13	0.020	mg/Kg wet	0.200		66.9	40-140			
Aroclor-1016 [2C]	0.13	0.020	mg/Kg wet	0.200		63.0	40-140			
Aroclor-1260	0.13	0.020	mg/Kg wet	0.200		64.5	40-140			
Aroclor-1260 [2C]	0.11	0.020	mg/Kg wet	0.200		57.1	40-140			mtv+
urrogate: Decachlorobiphenyl	0.143		mg/Kg wet	0.200		71.4	30-150			
urrogate: Decachlorobiphenyl [2C]	0.129		mg/Kg wet	0.200		64.7	30-150			
urrogate: Tetrachloro-m-xylene	0.130		mg/Kg wet	0.200		64.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.130		mg/Kg wet	0.200		65.0	30-150			
.CS Dup (B248210-BSD1)				Prepared: 12	2/12/19 Anal	yzed: 12/13/	19			
Aroclor-1016	0.14	0.020	mg/Kg wet	0.200		71.3	40-140	6.44	30	
Aroclor-1016 [2C]	0.14	0.020	mg/Kg wet	0.200		68.5	40-140	8.38	30	
Aroclor-1260	0.14	0.020	mg/Kg wet	0.200		69.6	40-140	7.57	30	
Aroclor-1260 [2C]	0.12	0.020	mg/Kg wet	0.200		61.1	40-140	6.72	30	-verw
urrogate: Decachlorobiphenyl	0.150		mg/Kg wet	0.200		75.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.136		mg/Kg wet	0.200		68.1	30-150			
Surrogate: Tetrachloro-m-xylene	0.141		mg/Kg wet	0.200		70.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.142		mg/Kg wet	0.200		70.8	30-150			



### Metals Analyses (Total) - Quality Control

Prepared:	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	Batch B248100 - SW-846 7471										
Property   27/11   Property   12/11   Property	Blank (B248100-BLK1)				Prepared: 12	2/11/19 Analy	zed: 12/12/	19			
	Mercury	ND	0.025	mg/Kg wet							
	LCS (B248100-BS1)				Prepared: 12	2/11/19 Analy	zed: 12/12/	19			
Source: 19L0400-18   Propared: 12/11/19   Analyzed: 12/12/19	Mercury	6.65	0.39	mg/Kg wet							
Source: 19L0400-18   Propared: 12/11/19   Analyzed: 12/12/19	LCS Dup (B248100-BSD1)				Prepared: 12	2/11/19 Analy	/zed: 12/12/	19			
Marix Spike (B248100-MS1)   Source: 191.0400-08   Propared: 12/11/19   Analyzed: 12/12/19   Satisfies (B248100-MS1)   Source: 191.0400-08   Propared: 12/11/19   Analyzed: 12/12/19   Satisfies (B248351-SW-846 30508   Source: 191.0400-08   Propared: 12/13/19   Analyzed: 12/16/19   Satisfies (B248351-SW-846 30508   Source: 191.0400-08   Propared: 12/13/19   Analyzed: 12/16/19   Source: 191.0400-08   Propared: 12/13/19   Analyzed: 12/16/19   Source: 191.0400-08   Source: 191.0400-0	Mercury	7.27	0.38	mg/Kg wet					8.91	20	
Marix Spike (B248100-MS1)   Source: 191.0400-08   Propared: 12/11/19   Analyzed: 12/12/19   Satisfies (B248100-MS1)   Source: 191.0400-08   Propared: 12/11/19   Analyzed: 12/12/19   Satisfies (B248351-SW-846 30508   Source: 191.0400-08   Propared: 12/13/19   Analyzed: 12/16/19   Satisfies (B248351-SW-846 30508   Source: 191.0400-08   Propared: 12/13/19   Analyzed: 12/16/19   Source: 191.0400-08   Propared: 12/13/19   Analyzed: 12/16/19   Source: 191.0400-08   Source: 191.0400-0	Duplicate (B248100-DUP1)	Son	rce: 191.0400	-08	Prepared: 12	2/11/19 Anals	/zed: 12/12/	19			
Source: 19L0400-18	Mercury				p-1001 12				NC	35	
Add	•				B			10	-		
Propared: 12/13/19 Analyzed: 12/16/19											
Prepared: 12/13/19   Analyzed: 12/16/19		0.401	0.027	mg/Kg ury	v.338	ND	112	13-123			
Artimony ND 1.7 mg/Kg wet Artimony ND 1.7 mg/Kg wet Sarium ND 1.7 mg/Kg wet Sarium ND 1.7 mg/Kg wet Sarium ND 1.7 mg/Kg wet Sarium ND 1.7 mg/Kg wet Sarium ND 1.7 mg/Kg wet Sarium ND 1.7 mg/Kg wet Sarium ND 1.7 mg/Kg wet Sarium ND 1.8 mg/Kg wet Sarium Sa	Batch B248351 - SW-846 3050B			····				·			
Arsenic ND 1.7 mg/Kg wet sharium ND 1.7 mg/Kg wet sharium ND 0.17 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet sharium ND 0.50 mg/Kg wet 147 80.3 4.2-196.6 mg/Kg wet 148 mg/Kg wet 149 101 83.2-117.5 mg/Kg wet sharium ND 0.50 mg/Kg wet 147 80.3 4.2-196.6 mg/Kg wet 148 mg/Kg wet 149 101 83.2-117.5 mg/Kg wet 149 102 83.2-117.5 mg/Kg wet 149 102 83.2-117.5 mg/Kg wet 149 102 83.2-117.5 mg/Kg wet 149 102 83.2-117.5 mg/Kg wet 149 102 83.2-117.5 mg/Kg wet 150 106 82.7-117.6 mg/Kg wet 150	Blank (B248351-BLK1)				Prepared: 12	1/13/19 Analy	/zed: 12/16/	19			
Sarium   ND   1.7   mg/Kg wet   mg/Kg we	Antimony	ND									
ryllium ND 0.17 mg/Kg wet chromium ND 0.17 mg/Kg wet chromium ND 0.33 mg/K g wet chromium ND 0.33 mg/Kg wet ched ND 0.50 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.33 mg/Kg wet ched ND 0.34 mg/Kg wet ched ND 0.66 mg/Kg wet ched N	Arsenic	ND	1.7								
Admium ND 0.17 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.33 mg/Kg wet Chromium ND 0.67 mg/Kg wet Chromium ND 0.67 mg/Kg wet Chromium ND 0.67 mg/Kg wet Chromium ND 0.67 mg/Kg wet Chromium ND 0.67 mg/Kg wet Chromium ND 0.68 mg/Kg wet Chromium Chrom	Barium	ND	1.7								
Chromium   ND   0.33   mg/Kg wet	ryllium	ND	0.17	mg/Kg wet							
ND	Jadmium	ND	0.17	mg/Kg wet							
Sickel   ND   0.33 mg/Kg wet	Chromium	ND	0.33	mg/Kg wet							
Selenium   ND   3.3 mg/Kg wet   Selenium   ND   0.33 mg/Kg wet   Selenium   ND   0.33 mg/Kg wet   Selenium   ND   0.67 mg/Kg wet   Selenium   ND   0.67 mg/Kg wet   Selenium   ND   0.67 mg/Kg wet   Selenium   ND   0.67 mg/Kg wet   Selenium	Lead	ND	0.50	mg/Kg wet							
ND   0.33 mg/Kg wet   Fallium   ND   1.7 mg/Kg wet   Fallium   ND   0.67 mg/Kg wet   Fallium   F	Nickel	ND	0.33	mg/Kg wet							
Tallium ND 1.7 mg/Kg wet Vanadium ND 0.67 mg/Kg wet Vince Vince ND 0.67 mg/Kg wet Vince Vince Vince ND 0.67 mg/Kg wet Vince Vi	Selenium	ND	3.3	mg/Kg wet							
Tallium ND 1.7 mg/Kg wet Vanadium ND 0.67 mg/Kg wet Vince Vince ND 0.67 mg/Kg wet Vince Vince Vince ND 0.67 mg/Kg wet Vince Vi	Silver	ND	0.33	mg/Kg wet							
Anadium   ND   0.67 mg/Kg wet   12/13/19 Analyzed: 12/16/19	Thallium	ND	1.7								
ND   0.67   mg/Kg wet   12/13/19   Analyzed: 12/16/19	Vanadium		0.67	mg/Kg wet							
Antimony 118 4.8 mg/Kg wet 147 80.3 4.2-196.6 mg/Kg wet 143 101 83.2-117.5 larium 440 4.8 mg/Kg wet 415 106 82.7-117.6 larium 182 0.48 mg/Kg wet 179 102 83.2-117.3 larium 55.9 0.48 mg/Kg wet 56.2 99.4 82.9-117.3 larium 101 0.96 mg/Kg wet 101 100 82.4-116.8 larium 101 0.96 mg/Kg wet 101 100 82.4-116.8 larium 101 0.96 mg/Kg wet 105 101 82.4-116.8 larium 101 0.96 mg/Kg wet 108 103 82.9-117.6 larium 101 0.96 mg/Kg wet 108 103 82.9-117.6 larium 101 0.96 mg/Kg wet 108 103 82.9-117.6 larium 109.6 mg/Kg wet 109.8 mg/Kg wet 109.8 109.3 larium 109.8 larium 109.6 mg/Kg wet 109.8 larium 109.8 la	Zine		0.67	mg/Kg wet							
Arsenic 144 4.8 mg/Kg wet 143 101 83.2-117.5 106 starium 440 4.8 mg/Kg wet 415 106 82.7-117.6 106 107.117.	LCS (B248351-BS1)				Prepared: 12	/13/19 Analy	zed: 12/16/	19			
Arsenic 144 4.8 mg/Kg wet 143 101 83.2-117.5 arium 440 4.8 mg/Kg wet 415 106 82.7-117.6 arium 182 0.48 mg/Kg wet 179 102 83.2-117.3 arium 55.9 0.48 mg/Kg wet 56.2 99.4 82.9-117.3 arium 101 0.96 mg/Kg wet 101 100 82.4-116.8 arium 101 0.96 mg/Kg wet 125 101 82.4-116.8 arium 111 0.96 mg/Kg wet 108 103 82.9-117.6 arium 109.6 mg/Kg wet 113 101 80.8-118.6 arium 109.6 mg/Kg wet 113 101 80.8-118.6 arium 109.6 mg/Kg wet 113 101 80.8-118.6 arium 109.6 mg/Kg wet 83.7 98.9 79.8-120.7	Antimony	118	4.8	mg/Kg wet	147		80.3	4.2-196.6			
starium       440       4.8 mg/Kg wct       415       106       82.7-117.6         steryllium       182       0.48 mg/Kg wct       179       102       83.2-117.3         cadmium       55.9       0.48 mg/Kg wct       56.2       99.4       82.9-117.3         chromium       101       0.96 mg/Kg wct       101       100       82.4-116.8         ead       126       1.4 mg/Kg wct       125       101       82.4-116.8         lickel       111       0.96 mg/Kg wct       108       103       82.9-117.6         elenium       69.1       9.6 mg/Kg wct       77.9       88.7       79.3-120.7         ilver       38.1       0.96 mg/Kg wct       34.3       111       81-119.2         hallium       114       4.8 mg/Kg wct       113       101       80.8-118.6         fanadium       82.8       1.9 mg/Kg wct       83.7       98.9       79.8-120.7	Arsenic		4.8	mg/Kg wet	143		101	83.2-117.5			
deryllium     182     0.48 mg/Kg wet     179     102     83.2-117.3       dadmium     55.9     0.48 mg/Kg wet     56.2     99.4     82.9-117.3       chromium     101     0.96 mg/Kg wet     101     100     82.4-116.8       ead     126     1.4 mg/Kg wet     125     101     82.4-116.8       lickel     111     0.96 mg/Kg wet     108     103     82.9-117.6       elenium     69.1     9.6 mg/Kg wet     77.9     88.7     79.3-120.7       ilver     38.1     0.96 mg/Kg wet     34.3     111     81-119.2       hallium     114     4.8 mg/Kg wet     113     101     80.8-118.6       fanadium     82.8     1.9 mg/Kg wet     83.7     98.9     79.8-120.7	Barium		4.8								
Edmium       55.9       0.48 mg/Kg wet       56.2       99.4 82.9-117.3         Chromium       101       0.96 mg/Kg wet       101       100 82.4-116.8         ead       126       1.4 mg/Kg wet       125       101 82.4-116.8         lickel       111       0.96 mg/Kg wet       108 103 82.9-117.6         elenium       69.1 9.6 mg/Kg wet       77.9 88.7 79.3-120.7         ilver       38.1 0.96 mg/Kg wet       34.3 111 81-119.2         hallium       114 4.8 mg/Kg wet       113 101 80.8-118.6         fanadium       82.8 1.9 mg/Kg wet       83.7 98.9 79.8-120.7	Beryllium		0.48				102				
Chromium     101     0.96 mg/Kg wet     101     100 82.4-116.8       ead     126     1.4 mg/Kg wet     125     101 82.4-116.8       lickel     111 0.96 mg/Kg wet     108 103 82.9-117.6       elenium     69.1 9.6 mg/Kg wet     77.9 88.7 79.3-120.7       ilver     38.1 0.96 mg/Kg wet     34.3 111 81-119.2       hallium     114 4.8 mg/Kg wet     113 101 80.8-118.6       fanadium     82.8 1.9 mg/Kg wet     83.7 98.9 79.8-120.7	Cadmium		0.48				99.4				
gead     126     1.4 mg/Kg wet     125     101 82.4-116.8       flickel     111 0.96 mg/Kg wet     108 103 82.9-117.6       gelenium     69.1 9.6 mg/Kg wet     77.9 88.7 79.3-120.7       ilver     38.1 0.96 mg/Kg wet     34.3 111 81-119.2       hallium     114 4.8 mg/Kg wet     113 101 80.8-118.6       fanadium     82.8 1.9 mg/Kg wet     83.7 98.9 79.8-120.7	Chromium		0.96	mg/Kg wet	101		100	82.4-116.8			
flickel     111     0.96 mg/Kg wet     108     103 82.9-117.6       elenium     69.1     9.6 mg/Kg wet     77.9     88.7 79.3-120.7       ilver     38.1     0.96 mg/Kg wet     34.3     111 81-119.2       hallium     114     4.8 mg/Kg wet     113     101 80.8-118.6       fanadium     82.8     1.9 mg/Kg wet     83.7     98.9 79.8-120.7	Lead		1.4		125		101	82.4-116.8			
clenium     69.1     9.6 mg/Kg wet     77.9     88.7 79.3-120.7       ilver     38.1     0.96 mg/Kg wet     34.3     111 81-119.2       hallium     114     4.8 mg/Kg wet     113     101 80.8-118.6       fanadium     82.8     1.9 mg/Kg wet     83.7     98.9 79.8-120.7	Nickel										
ilver 38.1 0.96 mg/Kg wet 34.3 111 81-119.2 hallium 114 4.8 mg/Kg wet 113 101 80.8-118.6 fanadium 82.8 1.9 mg/Kg wet 83.7 98.9 79.8-120.7	Selenium										
hallium 114 4.8 mg/Kg wet 113 101 80.8-118.6 (anadium 82.8 1.9 mg/Kg wet 83.7 98.9 79.8-120.7	Silver										
Fanadium 82.8 1.9 mg/Kg wet 83.7 98.9 79.8-120.7	Гhallium										
	/anadium										
	Zine	236	1.9	mg/Kg wet	240		98.3	80.8-118.8			



### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248351 - SW-846 3050B										
LCS Dup (B248351-BSD1)				Prepared: 12	/13/19 Anal	yzed: 12/16	/19			
Antimony	123	4.8	mg/Kg wet	147		84.0	4.2-196.6	4.54	30	
Arsenic	148	4.8	mg/Kg wet	143		104	83.2-117.5	2.84	30	
Barium	447	4.8	mg/Kg wet	415		108	82.7-117.6	1.57	20	
Beryllium	179	0.48	mg/Kg wet	179		100	83.2-117.3	1.42	30	
Cadmium	56.2	0.48	mg/Kg wet	56.2		100	82.9-117.3	0.580	20	
Chromium	104	0.97	mg/Kg wet	101		103	82.4-116.8	2.42	30	
ead	128	1.5	mg/Kg wet	125		103	82.4-116.8	1.94	30	
lickel	112	0.97	mg/Kg wet	108		103	82.9-117.6	0.519	30	
elenium	70.1	9.7	mg/Kg wet	77.9		89.9	79.3-120.7	1.43	30	
ilver	38.6	0.97	mg/Kg wet	34.3		113	81-119.2	1.37	30	
hallium	125	4.8	mg/Kg wet	113		111	80.8-118.6	9.17	30	
/anadium	85.4	1.9	mg/Kg wet	83.7		102	79.8-120.7	3.03	30	
inc	240	1.9	mg/Kg wet	240		100	80.8-118.8	1.65	30	
uplicate (B248351-DUP1)	Sou	rce: 19L0400	-01	Prepared: 12	/13/19 Analy	zed: 12/16	/19			
ntimony	ND	1.7	mg/Kg dry		ND			NC	35	
rsenic	10.8	1.7	mg/Kg dry		11.6			7.58	35	
arium	38.3	1.7	mg/Kg dry		36.9			3.53	35	
ryllium	0.369	0.17	mg/Kg dry		0.366			1.04	35	
admium	0.225	0.17	mg/Kg dry		0.254			12.2	35	
hromium	36.0	0.35	mg/Kg dry		31.1			14.6	35	
ead	53.5	0.52	mg/Kg dry		45.7			15.8	35	
ickel	23.6	0.35	mg/Kg dry		22.4			5.58	35	
elenium	ND	3.5	mg/Kg dry		ND			NC	35	
ilver	ND	0.35	mg/Kg dry		ND			NC	35	
hallium	ND	1.7	mg/Kg dry		ND			NC	35	
anadium	58.7	0.70	mg/Kg dry		55.8			5.08	35	
nc	62.2	0.70	mg/Kg dry		57.5			7.93	35	
atrix Spike (B248351-MS1)	Sou	rce: 19L0400	-01	Prepared: 12	/13/19 Analy	zed: 12/16/	/19			
ntimony	5.29	1.7	mg/Kg dry	17.1	ND	30.9	75-125			MS-07
rsenic	28.6	1.7	mg/Kg dry	17.1	11.6	99.2	75-125			
arium	55.0	1.7	mg/Kg dry	17.1	36.9	106	75-125			
eryllium	16.1	0.17	mg/Kg dry	17.1	0.366	91.9	75-125			
admium	15.7	0.17	mg/Kg dry	17.1	0.254	90.1	75-125			
hromium	50.1	0.34	mg/Kg dry	17.1	31.1	111	75-125			
ead	63.8	0.51	mg/Kg dry	17.1	45.7	106	75-125			
ickel	40.6	0.34	mg/Kg dry	17.1	22.4		75-125			
elenium	12.4	3.4	mg/Kg dry	17.1	ND	72.3	* 75-125			MS-07
lver	16.5	0.34	mg/Kg dry	17.1	ND	96.3	75-125			
nallium	18.8	1.7	mg/Kg dry	17.I	ND		75-125			
nnadium	76.3	0.68	mg/Kg dry	17.1	55.8		75-125			
			mg/Kg dry							



### QUALITY CONTROL

### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248351 - SW-846 3050B										
Reference (B248351-SRM1)				Prepared: 12	2/13/19 Anal	yzed: 12/16/1	19			
Lead	0.450	0.50	mg/Kg wet	0.495		90.8	80-120			



### Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B248096 - % Solids									
Duplicate (B248096-DUP1)	Source	e: 19L0400-01	Prepared &	Analyzed: 12	/11/19				
% Solids	94.1	% Wt		94.3			0.253	20	
Duplicate (B248096-DUP2)	Source	e: 19L0400-02	Prepared &	Analyzed: 12	/11/19				
% Solids	93.4	% Wt		90.8	1		2.78	20	
Duplicate (B248096-DUP3)	Source	e: 19L0400-03	Prepared &	Analyzed: 12	/11/19				
% Solids	92.2	% Wt		93.9	)		1.82	20	
Duplicate (B248096-DUP4)	Source	e: 19L0400-04	Prepared &	Analyzed: 12	/11/19				
% Solids	76.8	% Wt		77.4			0.750	20	



Aroclor-1260

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Gp4-2	(6-8")	

SW-846 8082A

Lab Sample ID:		19L0400-09		Date(s) Analyz		/zed: 12/14/201	9 12/1	12/14/2019	
Instrument ID (1):		ECD10		Instrument ID (2		) (2): E	ECD10		
G	C Column (1):	ID:	(m	nm) G	C Column (	2):	ID:	(mm)	
	ANALYTE	COL	RT	RTW	INDOW	CONCENTRATION	%RPD		
	711712772	002	'`'	FROM	то		701111		
	Aroclor-1254	1	0.000	0.000	0.000	13			
		2	0.000	0.000	0.000	15	14.3		

0.000

0.000

0.000

0.000

51

46

10.3

0.000

0.000



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS

SW-846 8082A

Lab Sample ID:	B248210-BS1		Date(s) Analyzed:	12/13/2019	12/13/201	19
Instrument ID (1):	ECD10		Instrument ID (2):	ECD10		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
7 11 12 1 hm 7 7 hm	002		FROM TO		CONCENTION	70111 5
Aroclor-1016	1	0.000	0.000	0.000	0.13	
	2	0.000	0.000	0.000	0.13	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.13	
	2	0.000	0.000	0.000	0.11	16.7



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

ı	LCS Dup	

SW-846 8082A

Lab Sample ID:	B248210-BSD1		Date(s) Analyzed:	12/13/2019	12/13	/2019
Instrument ID (1):	ECD10	-	Instrument ID (2):	ECD10		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD	
/////	002	111	FROM	TO	CONCENTION	70111 13	
Aroclor-1016	1	0.000	0.000	0.000	0.14		
	2	0.000	0.000	0.000	0.14	0.0	
Aroclor-1260	1	0.000	0.000	0.000	0.14		
	2	0.000	0.000	0.000	0.12	15.4	



### FLAG/QUALIFIER SUMMARY

•	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be climinated.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
RL-08	Elevated reporting limit due to sample matrix interference. MA CAM reporting limit not met.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.



### CERTIFICATIONS

ARTICOLOGY   CINHAYME, VANC	Analyte	Certifications	
Article	SW-846 6010D in Soil		
Beryllion	Antimony	CT,NH,NY,ME,VA,NC	
CHRINYME VANC	Arsenic	CT,NH,NY,ME,VA,NC	
Chemium	Barium	CT,NH,NY,ME,VA,NC	
Chromium	Beryllium	CT,NH,NY,ME,VA,NC	
Content	Cadmium	CT,NH,NY,ME,VA,NC	
Nickel	Chromium	CT,NH,NY,ME,VA,NC	
Seleminn	Lead	CT,NH,NY,AIHA,ME,VA,NC	
Silver	Nickel	CT,NH,NY,ME,VA,NC	
Thallium CTNENYME, VA.NC Vanadium CTNENYME, VA.NC Zine CTNENYME, VA.NC  SW-446 7471B in Soil  Mercury CTNENYNC, ME, VA  SW-446 7471B in Soil  Arcelor-1016 CTNENYNC, ME, VA, PA  Arcelor-1021 CC CTNENYNC, ME, VA, PA  Arcelor-1221 CTNENYNC, ME, VA, PA  Arcelor-1221 CTNENYNC, ME, VA, PA  Arcelor-1222 CTNENYNC, ME, VA, PA  Arcelor-1223 CTNENYNC, ME, VA, PA  Arcelor-1224 CTNENYNC, ME, VA, PA  Arcelor-1224 CTNENYNC, ME, VA, PA  Arcelor-1224 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 TRENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1221 CTNENYNC, ME, VA, PA  Arcelor-1221 CTNENYNC, ME, VA, PA  Arcelor-1221 CTNENYNC, ME, VA, PA  Arcelor-1222 CTNENYNC, ME, VA, PA  Arcelor-1222 CTNENYNC, ME, VA, PA  Arcelor-1224 CTNENYNC, ME, VA, PA  Arcelor-1224 CTNENYNC, ME, VA, PA  Arcelor-1224 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CTNENYNC, ME, VA, PA  Arcelor-1226 CT	Selenium	CT,NH,NY,ME,VA,NC	
Thallium	Silver	CT,NH,NY,ME,VA,NC	
Zinc	Thallium		
Mercury	Vanadium	CT,NH,NY,ME,VA,NC	
Mercury	Zinc	CT,NH,NY,ME,VA,NC	
Arcelor-1016	SW-846 7471B in Soil		
Arcelor-1016	Mercury	CT,NH,NY,NC,ME,VA	
Aroclor-1016 [ZC]	SW-846 8082A in Soil		
Aroclor-1221	Aroclor-1016	CT,NH,NY,NC,ME,VA,PA	
Arcelor-1221 [2C] CT.NH.NY.NC,ME,VA,PA Arcelor-1232 CT.NH.NY.NC,ME,VA,PA Arcelor-1232 CT.NH.NY.NC,ME,VA,PA Arcelor-1242 CT.NH.NY.NC,ME,VA,PA Arcelor-1242 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 (2C] CT.NH.NY.NC,ME,VA,PA Arcelor-1254 (2C] CT.NH.NY.NC,ME,VA,PA Arcelor-1254 CT.NH.NY.NC,ME,VA,PA Arcelor-1254 CT.NH.NY.NC,ME,VA,PA Arcelor-1260 CT.NH.NY.NC,ME,VA,PA Arcelor-1260 (3C] CT.NH.NY.NC,ME,VA,PA Arcelor-1262 NH,NY.NC,ME,VA,PA Arcelor-1262 NH,NY.NC,ME,VA,PA Arcelor-1263 (3C] NH,NY.NC,ME,VA,PA Arcelor-1265 NH,NY.NC,ME,VA,PA Arcelor-1266 (3C] NH,NY.NC,ME,VA,PA Arcelor-1267 (3C] NH,NY.NC,ME,VA,PA Arcelor-1268 (3C] NH,NY.NC,ME,VA,PA Arcelor-1210 CT.NH.NY.NC,ME,VA,PA Arcelor-1211 CT.NH.NY.NC,ME,VA,PA Arcelor-1221 CT.NH.NY.NC,ME,VA,PA Arcelor-1221 CT.NH.NY.NC,ME,VA,PA Arcelor-1222 CT.NH.NY.NC,ME,VA,PA Arcelor-1223 CT.NH.NY.NC,ME,VA,PA Arcelor-1224 CT.NH.NY.NC,ME,VA,PA Arcelor-1224 CT.NH.NY.NC,ME,VA,PA Arcelor-1224 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 CT.NH.NY.NC,ME,VA,PA Arcelor-1248 CT.NH.NY.NC,ME,VA,PA	Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232	Aroclor-1221	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA Aroclor-1256 CT,NH,NY,NC,ME,VA,PA Aroclor-1260 CT,NH,NY,NC,ME,VA,PA Aroclor-1260 CT,NH,NY,NC,ME,VA,PA Aroclor-1262 NH,NY,NC,ME,VA,PA Aroclor-1262 NH,NY,NC,ME,VA,PA Aroclor-1268 NH,NY,NC,ME,VA,PA Aroclor-1268 (2C) NH,NY,NC,ME,VA,PA Aroclor-1268 (2C) NH,NY,NC,ME,VA,PA Aroclor-1268 (2C) NH,NY,NC,ME,VA,PA Aroclor-1268 (2C) NH,NY,NC,ME,VA,PA Aroclor-1269 (2C) CT,NH,NY,NC,ME,VA,PA Aroclor-1260 CT,NH,NY,NC,ME,VA,PA Aroclor-1212 (2C) CT,NH,NY,NC,ME,VA,PA Aroclor-1221 CT,NH,NY,NC,ME,VA,PA Aroclor-1221 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 (2C) CT,NH,NY,NC,ME,VA,PA Aroclor-1248 (2C) CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242	Aroclor-1232	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242 [2C] CT.NH.NY.NC.ME, VA, PA Aroclor-1248 CT.NH.NY.NC.ME, VA, PA Aroclor-1248 [2C] CT.NH.NY.NC.ME, VA, PA Aroclor-1254 (2C] CT.NH.NY.NC.ME, VA, PA Aroclor-1254 (2C] CT.NH.NY.NC.ME, VA, PA Aroclor-1256 (2C] CT.NH.NY.NC.ME, VA, PA Aroclor-1260 (2C] CT.NH.NY.NC.ME, VA, PA Aroclor-1262 (2C] NH.NY.NC.ME, VA, PA Aroclor-1263 (2C] NH.NY.NC.ME, VA, PA Aroclor-1264 NH.NY.NC.ME, VA, PA Aroclor-1268 NH.NY.NC.ME, VA, PA Aroclor-1268 NH.NY.NC.ME, VA, PA Aroclor-1268 (2C] NH.NY.NC.ME, VA, PA Aroclor-1268 (2C] NH.NY.NC.ME, VA, PA Aroclor-1269 (2C] CT.NH.NY.NC.ME, VA, PA Aroclor-1210 CT.NH.NY.NC.ME, VA, PA Aroclor-1221 CT.NH.NY.NC.ME, VA, PA Aroclor-1221 CT.NH.NY.NC.ME, VA, PA Aroclor-1232 CT.NH.NY.NC.ME, VA, PA Aroclor-1232 CT.NH.NY.NC.ME, VA, PA Aroclor-1242 CT.NH.NY.NC.ME, VA, PA Aroclor-1242 CT.NH.NY.NC.ME, VA, PA Aroclor-1242 CT.NH.NY.NC.ME, VA, PA Aroclor-1248 CT.NH.NY.NC.ME, VA, PA Aroclor-1248 CT.NH.NY.NC.ME, VA, PA Aroclor-1248 CT.NH.NY.NC.ME, VA, PA Aroclor-1254 CT.NH.NY.NC.ME, VA, PA	Arocior-1232 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248   CT,NH,NY,NC,ME,VA,PA Aroclor-1254   CT,NH,NY,NC,ME,VA,PA Aroclor-1254   CT,NH,NY,NC,ME,VA,PA Aroclor-1254   CT,NH,NY,NC,ME,VA,PA Aroclor-1256   CT,NH,NY,NC,ME,VA,PA Aroclor-1260   CT,NH,NY,NC,ME,VA,PA Aroclor-1260   CT,NH,NY,NC,ME,VA,PA Aroclor-1262   NH,NY,NC,ME,VA,PA Aroclor-1262   NH,NY,NC,ME,VA,PA Aroclor-1268   NH,NY,NC,ME,VA,PA Aroclor-1268   CT,NH,NY,NC,ME,VA,PA Aroclor-1268   CT,NH,NY,NC,ME,VA,PA Aroclor-1268   CT,NH,NY,NC,ME,VA,PA Aroclor-1016   CT,NH,NY,NC,ME,VA,PA Aroclor-1211   CT,NH,NY,NC,ME,VA,PA Aroclor-1221   CT,NH,NY,NC,ME,VA,PA Aroclor-1232   CT,NH,NY,NC,ME,VA,PA Aroclor-1232   CT,NH,NY,NC,ME,VA,PA Aroclor-1242   CT,NH,NY,NC,ME,VA,PA Aroclor-1242   CT,NH,NY,NC,ME,VA,PA Aroclor-1242   CT,NH,NY,NC,ME,VA,PA Aroclor-1242   CT,NH,NY,NC,ME,VA,PA Aroclor-1242   CT,NH,NY,NC,ME,VA,PA Aroclor-1248   CT,NH,NY,NC,ME,VA,PA Aroclor-1248   CT,NH,NY,NC,ME,VA,PA Aroclor-1248   CT,NH,NY,NC,ME,VA,PA Aroclor-1248   CT,NH,NY,NC,ME,VA,PA Aroclor-1254   CT,NH,NY,NC,ME,VA,PA	Aroclor-1242	CT,NH,NY,NC,ME,VA,PA	
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Aroclor-1260 CT.NH.NY.NC,ME,VA,PA Aroclor-1262 NH,NY.NC,ME,VA,PA Aroclor-1262 NH,NY.NC,ME,VA,PA Aroclor-1262 (2C) NH,NY.NC,ME,VA,PA Aroclor-1268 NH,NY.NC,ME,VA,PA Aroclor-1268 (2C) NH,NY.NC,ME,VA,PA  Aroclor-1268 (2C) NH,NY.NC,ME,VA,PA  SW-846 8082A in Water  Aroclor-1016 CT.NH.NY.NC,ME,VA,PA Aroclor-1021 CT.NH.NY.NC,ME,VA,PA Aroclor-1221 CT.NH.NY.NC,ME,VA,PA Aroclor-1221 CT.NH.NY.NC,ME,VA,PA Aroclor-1232 CT.NH.NY.NC,ME,VA,PA Aroclor-1232 CT.NH.NY.NC,ME,VA,PA Aroclor-1242 CT.NH.NY.NC,ME,VA,PA Aroclor-1242 CT.NH.NY.NC,ME,VA,PA Aroclor-1242 CT.NH.NY.NC,ME,VA,PA Aroclor-1248 CT.NH.NY.NC,ME,VA,PA Aroclor-1248 CT.NH.NY.NC,ME,VA,PA Aroclor-1248 CT.NH.NY.NC,ME,VA,PA Aroclor-1254 CT.NH.NY.NC,ME,VA,PA	Aroclor-1254	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1262 NH,NY,NC,ME,VA,PA Aroclor-1268 NH,NY,NC,ME,VA,PA Aroclor-1268 (2C) NH,NY,NC,ME,VA,PA Aroclor-1268 (2C) NH,NY,NC,ME,VA,PA  Aroclor-1016 CT,NH,NY,NC,ME,VA,PA Aroclor-1016 (2C) CT,NH,NY,NC,ME,VA,PA Aroclor-1221 CT,NH,NY,NC,ME,VA,PA Aroclor-1221 CT,NH,NY,NC,ME,VA,PA Aroclor-1221 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1262 NH,NY,NC,ME,VA,PA Aroclor-1262 [2C] NH,NY,NC,ME,VA,PA Aroclor-1268 NH,NY,NC,ME,VA,PA Aroclor-1268 (2C] NH,NY,NC,ME,VA,PA  SW-846 8082A in Water  Aroclor-1016 CT,NH,NY,NC,ME,VA,PA Aroclor-1021 CT,NH,NY,NC,ME,VA,PA Aroclor-1221 CT,NH,NY,NC,ME,VA,PA Aroclor-1221 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1260	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1262 [2C] NH,NY,NC,ME,VA,PA Aroclor-1268 NH,NY,NC,ME,VA,PA  SW-846 8082A in Water  Aroclor-1016 CT,NH,NY,NC,ME,VA,PA Aroclor-1016 [2C] CT,NH,NY,NC,ME,VA,PA  Aroclor-1021 CT,NH,NY,NC,ME,VA,PA  Aroclor-1221 CT,NH,NY,NC,ME,VA,PA  Aroclor-1221 CT,NH,NY,NC,ME,VA,PA  Aroclor-1232 CT,NH,NY,NC,ME,VA,PA  Aroclor-1232 CT,NH,NY,NC,ME,VA,PA  Aroclor-1232 CT,NH,NY,NC,ME,VA,PA  Aroclor-1242 CT,NH,NY,NC,ME,VA,PA  Aroclor-1242 CT,NH,NY,NC,ME,VA,PA  Aroclor-1242 CT,NH,NY,NC,ME,VA,PA  Aroclor-1248 CT,NH,NY,NC,ME,VA,PA  Aroclor-1248 CT,NH,NY,NC,ME,VA,PA  Aroclor-1248 CT,NH,NY,NC,ME,VA,PA  Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1268 NH,NY,NC,ME,VA,PA Aroclor-1268 [2C] NH,NY,NC,ME,VA,PA  SW-846 8082A in Water  Aroclor-1016 CT,NH,NY,NC,ME,VA,PA Aroclor-1016 [2C] CT,NH,NY,NC,ME,VA,PA  Aroclor-1221 CT,NH,NY,NC,ME,VA,PA Aroclor-1221 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 (2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1262	NH,NY,NC,ME,VA,PA	
Aroclor-1268 [2C] NH,NY,NC,ME,VA,PA  SW-846 8082A in Water  Aroclor-1016 CT,NH,NY,NC,ME,VA,PA  Aroclor-1016 [2C] CT,NH,NY,NC,ME,VA,PA  Aroclor-1221 CT,NH,NY,NC,ME,VA,PA  Aroclor-1221 [2C] CT,NH,NY,NC,ME,VA,PA  Aroclor-1232 CT,NH,NY,NC,ME,VA,PA  Aroclor-1232 CT,NH,NY,NC,ME,VA,PA  Aroclor-1242 CT,NH,NY,NC,ME,VA,PA  Aroclor-1242 CT,NH,NY,NC,ME,VA,PA  Aroclor-1242 CT,NH,NY,NC,ME,VA,PA  Aroclor-1248 CT,NH,NY,NC,ME,VA,PA  Aroclor-1248 CT,NH,NY,NC,ME,VA,PA  Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA	
Aroclor-1016	Aroclor-1268	NH,NY,NC,ME,VA,PA	
Aroclor-1016	Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA	
Aroclor-1016 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1221 CT,NH,NY,NC,ME,VA,PA Aroclor-1221 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1232 CT,NH,NY,NC,ME,VA,PA Aroclor-1232 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1242 CT,NH,NY,NC,ME,VA,PA Aroclor-1242 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 CT,NH,NY,NC,ME,VA,PA Aroclor-1248 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	SW-846 8082A in Water		
Aroclor-1221	Aroclor-1016	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221 [2C] CT,NH,NY,NC,ME,VA,PA  Aroclor-1232 CT,NH,NY,NC,ME,VA,PA  Aroclor-1232 [2C] CT,NH,NY,NC,ME,VA,PA  Aroclor-1242 CT,NH,NY,NC,ME,VA,PA  Aroclor-1242 [2C] CT,NH,NY,NC,ME,VA,PA  Aroclor-1248 CT,NH,NY,NC,ME,VA,PA  Aroclor-1248 [2C] CT,NH,NY,NC,ME,VA,PA  Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232	Aroclor-1221	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232 [2C]       CT,NH,NY,NC,ME,VA,PA         Aroclor-1242       CT,NH,NY,NC,ME,VA,PA         Aroclor-1242 [2C]       CT,NH,NY,NC,ME,VA,PA         Aroclor-1248       CT,NH,NY,NC,ME,VA,PA         Aroclor-1248 [2C]       CT,NH,NY,NC,ME,VA,PA         Aroclor-1254       CT,NH,NY,NC,ME,VA,PA	Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242       CT,NH,NY,NC,ME,VA,PA         Aroclor-1242 [2C]       CT,NH,NY,NC,ME,VA,PA         Aroclor-1248       CT,NH,NY,NC,ME,VA,PA         Aroclor-1248 [2C]       CT,NH,NY,NC,ME,VA,PA         Aroclor-1254       CT,NH,NY,NC,ME,VA,PA	Aroclor-1232	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242 [2C]       CT,NH,NY,NC,ME,VA,PA         Aroclor-1248       CT,NH,NY,NC,ME,VA,PA         Aroclor-1248 [2C]       CT,NH,NY,NC,ME,VA,PA         Aroclor-1254       CT,NH,NY,NC,ME,VA,PA	Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248         CT,NH,NY,NC,ME,VA,PA           Aroclor-1248 [2C]         CT,NH,NY,NC,ME,VA,PA           Aroclor-1254         CT,NH,NY,NC,ME,VA,PA	Aroclor-1242	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248 [2C] CT,NH,NY,NC,ME,VA,PA Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1254 CT,NH,NY,NC,ME,VA,PA	Aroclor-1248	CT,NH,NY,NC,ME,VA,PA	
	Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA	
	Aroclor-1254	CT,NH,NY,NC,ME,VA,PA	



### CERTIFICATIONS

Analyte	Certifications
SW-846 8082A in Water	
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8270D-E in Soil	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
	NY,NH
	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
	CT,NY,NH
	CT,NY,NH
	CT,NY,NH
	NY,NH
	CT,NY,NH
Fluorene	NY,NH



### CERTIFICATIONS

Analyte	Certifications
SW-846 8270D-E in Soil	
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH
SW-846 8270D-E in Water	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acctophenone	NY
Aniline	CT,NY
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	CT,NY,NH
1,3-Dichlorobenzene	CT,NY,NH
1,4-Dichlorobenzene	CT,NY,NH



### CERTIFICATIONS

Analyte	Certifications
SW-846 8270D-E in Water	
3,3-Dichlorobenzidine	СТ,NY,NH
2,4-Dichlorophenol	СТ,NY,NH
Diethylphthalate	СТ,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine/Azobenzene	NY
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	СТ, NY, NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenoi	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH



The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publile Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

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	Page of	<sup>2</sup> Preservation Code	Courier Use Only	Total Number Of		GLASS	PLASTIC	BACTERIA	ENCORE		Glassware in the fridge?	N/A	Glassware in freezer? Y / N	Prepackaged Cooler? Y / N	Contest is not responsible for	missing samples from prepacked	Control of the contro	GW = Ground Water	WW = Waste Water	A Alf	SL * Sludge	o = Other (please	define)		Preservation Codes:	M = MCL			7 = Sodium Hydroxide	O = Other (please	deline)		Non Soxhlet	In the Chain of Custody. The not is used to determine what not is used to determine what are detailed to a sufficient on, but will not to a manage information, but will not to a manage information.
6	ANALYSIS REQUESTED																										Please use the following codes to indicate	possible sample concentration within the Conc Code column above:	H - High; M - Medium; L - Low; C - Clean; U -	UNKUOMI		Other	AIHA-LAP,LLC	Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custoby. The Chain of Custoby is a legal document that must be complete and accurate and its used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con Test values your partnership on each project and will try to assist with missing information, but will not the held accountable.
Dac # 381 Rev 2_06262019	928			51 134	-J.	_		ر ارکا اع		500 800 800 800 800 800 800 800 800 800	יאר יאר	/ / §	XX	× ×	×   (	X	     X   X	X	* * *	1,4	2	<b>\</b>								MA State DW Required		WRTA		ist Labs is not responsible i a legal document that mus ory will perform. Any miss riership on each project ar
	g	Field Filtered	Carthophosphate Samples	Field Filtered	Lab to Filter		EXCEL FX		7	12 12 12 12 12 12 12 12 12 12 12 12 12 1		ICASS PLASSIC BACTERIA ENCORE	٠,	×	×	<u> </u>	7		1	د ا	5 %			d)		special kequirements	MCP Certification Form Beneficial	ט	RCP Certification Form Required	MA State		MWRA	School	Disclaimer: Con-Te Chain of Custody is: analyses the laborat Test values your part
<u>estlabs.com</u> CHAIN OF CUSTODY RECORD	irnaround Time	Die Date		°	_	ta Delive	÷		,	4	V/V	_	Sei 2			,		,		8	2			:- run via microwave	,	)X	1				# OISMa	Municipality	21 J Brownfield	
NUB: / / www.contestlabs.com CHAIN OF CI	Requested Turnaroup	O-Day (std)	Approval R			pat.		CLP Like Data Pkg Required:	Email To: 6 Services	*			6843	842	725	75 ~	1 201	1055	0	1155	3		:	Per client- rur	17/11/20	CHOT LIGHT THE THE THE THE THE THE THE THE THE T					Md	ient .		
1960 400	abs.com	τ ,	9		2-bay	LT HOM Format	Other:	CLP	Ema	Fax To #		253	8 6/8/7	8		50117		/ (		P	-61)		Client Comments:	4	11/9	198	800	6	10.575 CO	T	0.00	Gove	Federal	
Phone: 413-525-2332	Fax: 413-525-6405 Email: Info@contestlabs.com	Consultans	20	7	1. 155ave	33 000	CAMP \$ 11			4-13 7	Client Sample (B.) (Descript)		4	1/2	2012		2-64-5(6-8	604-6(3-5	107173-5	2-0) 6-40	16-9) z - 400	l	Date/Time:	12/10/	6-01-11 pro-	2-10-19	Date/Tyme:	12/10/1	(21/21)	E C	Je Ploye		Date/Time:	
Con-test	MMR		Hune	V87 X80	10 m	4umber: 1830. /	Project Manager: Ka The	/em	oient:	By: 12, Sur of	Con-Test Work Order#							9	7	Se Se	4 6	V	pedlan (signature)	et by: (stenature)	and Child	2	Dy: Leignature)		S of Jugarane)	by: (signature)	elinquished by: (signature)	Paralised by Trigonities)	oy. tsignature)	orments:
1		ig O	Address:	Professional	Project i	Project Number:	Project,	Con-Tes	Invoice !	Sampled By:													Retinguis	A Caring	Se Cook	die	Received b		W.	Received by:	Relinguis	Derofinad	שברבואבו	ੈ Page 65 of 67

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples\_\_\_\_\_



Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False
Statement will be brought to the attention of the Client - State True or False

Received By	W BBR		Date	12/10/	Tra	Time	2030	
How were the sample:	In Cooler		No Cooler	10-1101		-		
received?	000.0.		INO COOIEI _		On Ice		_ No Ice	
	Direct from Sam	•			Ambient		_ Melted Ice _	
Were samples within	<u></u>	By Gun #	2	A	ctual Tem	p- 4,1		
Temperature? 2-6°C	1	By Blank #		Α	ctual Tem	p -		
Was Custody S	Seal Intact?	n <i>l</i> a	Wer	e Samples			1)4	
Was COC Reli	nquished?	T		Chain Agre	•		<b>T</b>	
Are there broken/	leaking/loose cap	on any sam		F		•		
Is COC in ink/ Legible?		•	_	ples receive	ed within ho	oldina time?	7	
Did COC include all	Client		Analysis	T		er Name		
pertinent Information?	Project	1	ID's	7		Dates/Times	<u> </u>	
Are Sample labels fille	d out and legible?	T		<del></del>				
Are there Lab to Filters'	_	F		Who was r	notified?			
Are there Rushes?		F		Who was n				
Are there Short Holds?		E		Who was n	-			
s there enough Volume	?	4		***************************************				
s there Headspace who		n h	N.	/IS/MSD?	F			
roper Media/Containe		7		s splitting sa	moles real	uired?	F	
Vere trip blanks receive		===		on COC?		3,100:		
o all samples have the				nh —	···	Base	nla	
			yearte terrananana	STANCE CONTRACTOR	econocide de la propertie de l			si hemorousien voi
Jnp-	1 Liter Amb.		1 Liter Pi	la edia		10		Mar Valle
ICL-	500 mL Amb.		500 mL P				Amb.	
1eoh-	250 mL Amb.		250 mL P				b/Clear	9
isulfate-	Flashpoint		Col./Bac				b/Clear	
) -	Other Glass	<del></del>	Other Pla				b/Clear core	
						F-11	ore	
	SOC Kit	' l	Plastic I	l ne <i>F</i>	10		······································	
hiosulfate-	SOC Kit Perchlorate		Plastic I			rozen:		April Papa Araba (j. 182
hiosulfate-	SOC Kit Perchlorate		Ziploc	k				
hiosulfate-				k				
hiosulfate- ulfuric-	Perchlorate	No State (1985)	Ziploc			rozen:		
hiosulfate- ulfuric	Perchlorate		Ziploo	astic		Frozen:	Amb.	
hiosulfate- ulfuric- np- CL-	Perchlorate  1 Liter Amb.  500 mL Amb.		Ziploc Liter Pl 500 mL P	astic		Frozen: 16 oz 8oż Am	Amb.	
hiosulfate- ulfuric	Perchlorate  1 Liter Amb  500 mL Amb.  250 mL Amb.		Ziploc Liter Pl 500 mL P 250 mL P	astic lastic lastic		Frozen:  16 oz  8oz Am  4oz Am	Amb. b/Clear b/Clear	
hiosulfate- ulfuric- np- CL- eoh- sulfate-	Perchlorate  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria		Liter Plants 500 mL P 250 mL P Flashpo	astic lastic lastic lint		Frozen:  16 oz 8oz Am 4oz Am 2oz Am	Amb. b/Clear b/Clear b/Clear	
np- CL- eoh- sulfate-	Perchlorate  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic		1 Liter Pl 500 mL P 250 mL P Flashpo Other Gl	astic lastic lastic lint ass		16 oz 8oż Am 4oz Am 2oz Am Enc	Amb. b/Clear b/Clear b/Clear	
np- CL- leoh- isulfate- l-	Perchlorate  1 Liter-Amb: 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic SOC Kit		1 Liter Pl 500 mL P 250 mL P Flashpo Other Gl Plastic E	astic lastic las		Frozen:  16 oz 8oz Am 4oz Am 2oz Am	Amb. b/Clear b/Clear b/Clear	
np- CL- eoh- isulfate- l- niosulfate- ulfuric- omments:	Perchlorate  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic		1 Liter Pl 500 mL P 250 mL P Flashpo Other Gl	astic lastic las		16 oz 8oż Am 4oz Am 2oz Am Enc	Amb. b/Clear b/Clear b/Clear	

		MADE	P MCP Analytical I	Method Report Cer	tification Form		
Lab	oratory Name	e: Con-Test Ana	lytical Laboratory		Project #: 19L	0400	
Proj	ect Location:	240 Beaver S	t. Waltham, MA		RTN:		
			the following data se	t: [list Laboratory Sar	mple ID Number(s)]		
19	L0400-01 thru	ı 19L0400-09		· · · · · · · · · · · · · · · · · · ·			
Matr		Soil				****	
C	AM Protoco	ol (check all that i	below)				
	VOC IIIA()	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A ( )	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlo CAM V	orate 'III B()
1	SVOC IIIB (X)	7010 Metals CAM III C ()	MassDEP VPH CAM IV C ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassD CAM IX	EP APH 〈A()
	Metals	6020 Metals CAM III D ( )	MassDEP EPH CAM IV B ( )	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ( )	TO-15 CAM IX	
	A	ffirmative response	to Questions A throu	ghF is required for "P	resumptive Certainty"	status	
A		erved (including temper		described on the Chain- atory, and prepared/anal		☑ Yes	□No¹
В	Were the anal protocol(s) foll		l associated QC requirem	nents specificed in the sel	ected CAM	☑ Yes	□No¹
С			ind analytical response a led performance standar	ctions specified in the sel dingle of the sel di	ected CAM	☑ Yes	□No¹
D				ements specified in CAM sition and Reporting of Ar		☑ Yes	□No¹
Ea			Vas each method conduction at list of section (section)			☐ Yes	□No¹
Εb	APH and TO-1	5 Methods only: Was t	he complete analyte list r	eported for each method	?	☐ Yes	□No¹
F				ard non-conformances ide to Qestions A through E)		☑ Yes	□No¹
	A response	e to questions G, H	and I below is require	d for "Presumptive Co	ertainty" status		
G	Were the repo	rting limits at or below a	all CAM reporting limits s	pecified in the selected C	AM	☐ Yes	☑No¹
				status may not neces R 40. 1056 (2)(k) and V	sarily meet the data us VSC-07-350.	sability	
Н	Were all QC po	erfomance standards s	pecified in the CAM proto	ocol(s) achieved?		□ <sub>Yes</sub>	☑ <sub>No¹</sub>
ı	Were results re	eported for the complet	e analyte list specified in	the selected CAM protoc	ol(s)?	☑ Yes	□No¹
<sup>1</sup> All	Negative respo	onses must be addre	ssed in an attached Er	nvironmental Laborator	y case narrative.		
thos	se responsible		nformation, the mater		oon my personal inqui nalytical report is, to t		
Sigr	nature:	hisa W	forthungton_	Position:	Technical Represen	tative	
Prin	ted Name:	Lisa A. Worthingt	on	Date:	2/17/19		

-

December 3, 2019

Alan Sundquist CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

Project Location: Beaver St., Waltham, MA

Client Job Number: Project Number: 1552

Laboratory Work Order Number: 19K1404

Michelle Koch

Enclosed are results of analyses for samples received by the laboratory on November 22, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Koch Project Manager

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CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

ATTN: Alan Sundquist

PURCHASE ORDER NUMBER:

REPORT DATE: 12/3/2019

PROJECT NUMBER:

ANALYTICAL SUMMARY

WORK ORDER NUMBER:

1552

19K1404

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Beaver St., Waltham, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HB-16	19K1404-01	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-17	19K1404-02	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-19	19K1404-03	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	;
HB-20	19K1404-04	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-22	19K1404-05	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-23	19K1404-06	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-24	19K1404-07	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-25	19K1404-08	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-26	19K1404-09	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-27	19K1404-10	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	



### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.



SW-846 6010D

#### Qualifications:

MS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

19K1404-01[HB-16], B247118-MS1

SW-846 7471B

### Qualifications:

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this

compound.
Analyte & Samples(s) Qualified:

B247114-BSD1

SW-846 8270D-E

### Qualifications:

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side. Analyte & Samples(s) Qualified:

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], 19K1404-09[HB-26], 19K1404-10[HB-27], B246869-BLK1, B246869-BS1, B246869-BSD1

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated. ...alyte & Samples(s) Qualified:

2,4-Dinitrophenol

19K1404-09[HB-26], 19K1404-10[HB-27]

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

### Analyte & Samples(s) Qualified:

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], 19K1404-09[HB-26], 19K1404-10[HB-27], B246869-BLK1, B246869-BS1, B246869-BSD1

Hexachlorocyclopentadiene

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1

Pentachlorophenol

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-07[

19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound. Analyte & Samples(s) Qualified:

2.4-Dinitrophenol

19K1404-09[HB-26], 19K1404-10[HB-27]

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated

### Analyte & Samples(s) Qualified:

hloroaniline

4.1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1



V-35

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is

### estimated. Analyte & Samples(s) Qualified:

#### 2-Nitroaniline

19K1404-09[HB-26], 19K1404-10[HB-27]

#### Benzidin

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

l certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

Page 7 of 61

Work Order: 19K1404



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Pate Received: 11/22/2019
Field Sample #: HB-16

Sampled: 11/20/2019 14:00

Sample ID: 19K1404-01
Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Acenaphthylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Acetophenone	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Aniline	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzidine	ND	1.2	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(a)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(a)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(b)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(g,h,i)perylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(k)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzoic Acid	ND	1.8	mg/Kg dry	i	L-04	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Bis(2-chloroethoxy)methane	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Bis(2-chloroethyl)ether	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Bis(2-chloroisopropyl)ether	ND	0.61	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.61	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Bromophenylphenylether	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Butylbenzylphthalate	ND	0.61	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Carbazole	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Chloroaniline	ND	1.2	mg/Kg dry	l	V-34	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Chloronaphthalene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Chlorophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Chlorophenylphenylether	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Chrysene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Dibenz(a,h)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Dibenzofuran	ND	0.61	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Di-n-butylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,2-Dichlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,3-Dichlorobenzene	ND	0.61	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,4-Dichlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
3,3-Dichlorobenzidine	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4-Dichlorophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Diethylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4-Dimethylphenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Dimethylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4,6-Dinitro-2-methylphenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4-Dinitrotoluene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,6-Dinitrotoluene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Di-n-octylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,2-Diphenylhydrazine/Azobenzene	ND					SW-846 8270D-E SW-846 8270D-E			KLB
Fluoranthene		0.61	mg/Kg dry	1			11/24/19	11/27/19 22:17	
	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Fluorene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

ate Received: 11/22/2019
Field Sample #: HB-16

Sampled: 11/20/2019 14:00

Sample ID: 19K1404-01 Sample Matrix: Soil

		Semi	volatile Organic Co	ompounds by	GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Hexachlorobutadiene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Hexachlorocyclopentadiene	ND	0.61	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Hexachloroethane	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Indeno(1,2,3-cd)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Isophorone	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Methylphenol	ND	0.61	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
3/4-Methylphenol	ND	0.61	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Naphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Nitroaniline	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
3-Nitroaniline	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Nitroaniline	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Nitrobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Nitrophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Nitrosodimethylamine	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.61	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
N-Nitrosodi-n-propylamine	ND	0.61	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Pentachloronitrobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Pentachlorophenol	ND	0.61	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Phenanthrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Phenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Рутепе	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Pyridine	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,2,4-Trichlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4,5-Trichlorophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4,6-Trichlorophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
2-Fluorophenol		68.6	30-130					11/27/19 22:17	
Phenol-d6		68.9	30-130					11/27/19 22:17	
Nitrobenzene-d5		66.4	30-130					11/27/19 22:17	
2-Fluorobiphenyl		69.6	30-130					11/27/19 22:17	
2,4,6-Tribromophenol		73.3	30-130					11/27/19 22:17	
p-Terphenyl-d14		92.5	30-130					11/27/19 22:17	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

ate Received: 11/22/2019
Field Sample #: HB-16

Sampled: 11/20/2019 14:00

Sample ID: 19K1404-01
Sample Matrix: Soil

			Metals Analy	ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1	MS-07	SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Arsenic	8.1	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Barium	64	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Beryllium	0.49	0.30	mg/Kg dry	I		SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Cadmium	ND	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Chromium	14	0,60	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Lead	87	0.90	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Mercury	0.11	0.044	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:47	CJV
Nickel	9.8	0.60	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Sclenium	ND	6.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Silver	ND	0.60	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Thallium	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Vanadium	37	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	МЈН
Zinc	70	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 16:41	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Pate Received: 11/22/2019
Field Sample #: HB-16

Sampled: 11/20/2019 14:00

Sample ID: 19K1404-01 Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		55.8		% Wı	1		SM 2540G	11/25/19	11/26/19 10:38	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-17

Sampled: 11/20/2019 15:00

Sample ID: 19K1404-02 Sample Matrix: Soil

			Semivolatile Organic C	ompounds b	y GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0,30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Acenaphthylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Acetophenone	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Aniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzidine	ND	1.1	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(a)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(a)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(b)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(g,h,i)perylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(k)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzoic Acid	ND	1.7	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Bis(2-chlorocthoxy)methane	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Bis(2-chloroethyl)ether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Bis(2-chloroisopropyl)ether	ND	0.59	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Bromophenylphenylether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Butylbenzylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Carbazole	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Chloroaniline	ND	1.1	mg/Kg dry	l	V-34	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Chloro-3-methylphenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Chloronaphthalene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Chiorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Chlorophenylphenylether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Chrysene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Dibenz(a,h)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Dibenzofuran	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Di-n-butylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,2-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,3-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,4-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
3,3-Dichlorobenzidine	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4-Dichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Diethylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4-Dimethylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Dimethylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4,6-Dinitro-2-methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4-Dinitrophenol	ND	1.1	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4-Dinitrotoluene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,6-Dinitrotoluene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Di-n-octylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Fluorene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-17

Sampled: 11/20/2019 15:00

Sample ID: 19K1404-02 Sample Matrix: Soil

		Semi	ivolatile Organic Co	ompounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Hexachlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Hexachlorobutadiene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Hexachlorocyclopentadiene	ND	0.59	mg/Kg dry	ı	V-05	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Hexachloroethane	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Indeno(1,2,3-cd)pyrene	ND	0.30	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Isophorone	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Methylphenol	ND	0.59	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
3/4-Methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Naphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
3-Nitroaniline	ND	0.59	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Nitrobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Nitrophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
N-Nitrosodimethylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
N-Nitrosodi-n-propylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Pentachloronitrobenzene	ND	0.59	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Pentachlorophenol	ND	0.59	mg/Kg dry	I	V-05	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Phenanthrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Phenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Pyridine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,2,4-Trichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4,5-Trichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4,6-Trichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		69.6	30-130					11/27/19 22:40	
Phenol-d6		69.9	30-130					11/27/19 22:40	
Nitrobenzene-d5		66.8	30-130					11/27/19 22:40	
2-Fluorobiphenyl		67.8	30-130					11/27/19 22:40	
2,4,6-Tribromophenol p-Terphenyl-d14		74.3 87.2	30-130 30-130					11/27/19 22:40 11/27/19 22:40	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-17

Sampled: 11/20/2019 15:00

Sample ID: 19K1404-02
Sample Matrix: Soil

•			Metals Analy	ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	l		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Arsenic	6.8	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Barium	56	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Beryllium	0.45	0.29	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Cadmium	0.29	0.29	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Chromium	13	0.58	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Lead	93	0.87	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Mercury	0.12	0.046	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:48	CJA
Nickel	9.4	0.58	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Scienium	ND	5.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Silver	ND	0.58	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Thallium	ND	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Vanadium	37	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	МЈН
Zinc	60	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 16:46	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Pate Received: 11/22/2019
Field Sample #: HB-17

Sampled: 11/20/2019 15:00

Sample ID: 19K1404-02
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		56.6		% Wt	1		SM 2540G	11/25/19	11/26/19 10:38	adb

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 Field Sample #: HB-19

Sampled: 11/21/2019 08:30

Sample ID: 19K1404-03 Sample Matrix: Soil

			Semivolatile Organic C	ompounds b	y GC/MS				
	ga. 1.	D.F.	** **	Dil. d	m/01	Made	Date	Date/Time	4
Analyte Acenaphthene	Results ND	RL 0.25	Units	Dilution 1	Flag/Qual	Method SW-846 8270D-E	Prepared 11/24/19	Analyzed 11/27/19 23:03	Analys KLB
Acenaphthylene	ND ND	0.25	mg/Kg dry mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Acetophenone	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Aniline	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Anthracene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzidine	ND	0.23	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(a)anthracene	0.51	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(a)pyrene	0.60	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(b)fluoranthene	0.81	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(g,h,i)perylene	0.43	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(k)fluoranthene	0.31	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzoic Acid	ND	1.5	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Bis(2-chloroethoxy)methane	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Bis(2-chloroethyl)ether	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Bis(2-chloroisopropyl)ether	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Bromophenylphenylether	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Butylbenzylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Carbazole	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Chloroaniline	ND	0.98	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Chloro-3-methylphenol	ND	0.98	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Chloronaphthalene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Chlorophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Chlorophenylphenylether	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Chrysene	0.66	0.25	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Dibenz(a,h)anthracene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Dibenzofuran	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Di-n-butylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,2-Dichlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,3-Dichlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,4-Dichlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
3,3-Dichlorobenzidine	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4-Dichlorophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Diethylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4-Dimethylphenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Dimethylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4,6-Dinitro-2-methylphenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4-Dinitrophenol	ND	0.98	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4-Dinitrotoluene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,6-Dinitrotoluene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Di-n-octylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
,2-Diphenylhydrazine/Azobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Fluoranthene	1.1	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Fluorene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB



Project Location: Beaver St., Waltham, MA

Sample Description:

Sample Description.

Work Order: 19K1404

Pate Received: 11/22/2019 Field Sample #: HB-19 Sample ID: 19K1404-03

Sampled: 11/21/2019 08:30

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Hexachlorobutadiene	ND	0.50	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Hexachlorocyclopentadicne	ND	0.50	mg/Kg dry	I	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Hexachloroethane	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Indeno(1,2,3-cd)pyrene	0.50	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Isophorone	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1-Methylnaphthalene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Methylnaphthalene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Methylphenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
3/4-Methylphenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Naphthalene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Nitroaniline	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
3-Nitroaniline	ND	0.50	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Nitroaniline	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Nitrobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Nitrophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Nitrophenol	ND	0.98	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
N-Nitrosodimethylamine	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
N-Nitrosodi-n-propylamine	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Pentachloronitrobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Pentachlorophenol	ND	0.50	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Phenanthrene	0.54	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Phenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Pyrene	1.3	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Pyridine	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,2,4-Trichlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4,5-Trichlorophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4,6-Trichlorophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
2-Fluorophenol	·	66.5	30-130			· · · · · · · · · · · · · · · · · · ·		11/27/19 23:03	
Phenol-d6		68.7	30-130					11/27/19 23:03	
Nitrobenzene-d5		66.6	30-130					11/27/19 23:03	
2-Fluorobiphenyl		68.9	30-130					11/27/19 23:03	
2,4,6-Tribromophenol		72.8	30-130					11/27/19 23:03	
p-Terphenyl-d14		87.2	30-130					11/27/19 23:03	



Project Location: Beaver St., Waltham, MA

Sample Description:

110

0.99

Work Order: 19K1404

11/26/19 11/27/19 16:51 TBC

SW-846 6010D

Date Received: 11/22/2019
Field Sample #: HB-19

Sampled: 11/21/2019 08:30

Sample ID: 19K1404-03
Sample Matrix: Soil

Zinc

			Metals Analy	yses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Arsenic	6.9	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Barium	40	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Beryllium	0.31	0.25	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Cadmium	0.57	0.25	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Chromium	26	0.49	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Lead	350	0.74	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Mercury	0.11	0.038	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:50	CJV
Nickel	16	0.49	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Sclenium	ND	4.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Silver	ND	0.49	mg/Kg dry	ı		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН
Thallium	ND	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Vanadium	35	0.99	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	МЈН

mg/Kg dry



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 Field Sample #: HB-19

Sampled: 11/21/2019 08:30

Sample ID: 19K1404-03
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		67.0		% Wt	1		SM 2540G	11/25/19	11/26/19 10:38	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-20

Sampled: 11/21/2019 09:00

Sample ID: 19K1404-04
Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

			Semivolatile Organic C	ompounds b	y GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Acenaphthylene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Acetophenone	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Aniline	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Anthracene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzidine	ND	1.4	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(a)anthracene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(a)pyrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(b)fluoranthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(g,h,i)perylene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(k)fluoranthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzoic Acid	ND	2.1	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Bis(2-chloroethoxy)methanc	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Bis(2-chloroethyl)ether	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Bis(2-chloroisopropyl)ether	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Bromophenylphenylether	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
utylbenzylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Carbazole	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Chloroaniline	ND	1.4	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Chloro-3-methylphenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Chloronaphthalene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Chlorophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Chlorophenylphenylether	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Chrysene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Dibenz(a,h)anthracene	ND	0.36	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Dibenzofuran	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Di-n-butylphthalate	ND	0.72	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,2-Dichlorobenzene	ND	0.72	mg/Kg dry	ì		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,3-Dichlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,4-Dichlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
3,3-Dichlorobenzidine	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4-Dichlorophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Diethylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4-Dimethylphenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Dimethylphthalate		0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
	ND					SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4,6-Dinitro-2-methylphenol	ND	0.72	mg/Kg dry	1			11/24/19	11/27/19 23:26	KLB
2,4-Dinitrophenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4-Dinitrotoluene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E			
2,6-Dinitrotoluene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
i-n-octylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
/,2-Diphenylhydrazine/Azobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Fluoranthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Fluorene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 ield Sample #: HB-20

Sampled: 11/21/2019 09:00

Sample ID: 19K1404-04 Sample Matrix: Soil

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.72	mg/Kg dry	1	riag/Quai	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Hexachlorobutadiene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Hexachlorocyclopentadiene	ND	0.72	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Hexachloroethane	ND	0.72	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Indeno(1,2,3-cd)pyrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Isophorone	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1-Methylnaphthalene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Methylnaphthalene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Methylphenol	ND	0.72	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
3/4-Methylphenol	ND	0.72		1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Naphthalene			mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Nitroaniline	ND	0.36	mg/Kg dry			SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
3-Nitroaniline	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19		KLB
	ND	0.72	mg/Kg dry	1				11/27/19 23:26	KLB
4-Nitroaniline	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	
Nitrobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Nitrophenol	ND	0.72	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Nitrophenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
N-Nitrosodimethylamine	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
I-Nitrosodiphenylamine/Diphenylamine	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
N-Nitrosodi-n-propylamine	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Pentachloronitrobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Pentachlorophenol	ND	0.72	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Phenanthrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Phenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Pyrene	ND	0.36	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Pyridine	ND	0.72	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,2,4-Trichlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4,5-Trichlorophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4,6-Trichlorophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
2-Fluorophenol		63.5	30-130		-			11/27/19 23:26	
Phenol-d6		68.9	30-130					11/27/19 23:26	
Nitrobenzene-d5		67.4	30-130					11/27/19 23:26	
2-Fluorobiphenyl		71.3	30-130					11/27/19 23:26	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-20

Sampled: 11/21/2019 09:00

Sample ID: 19K1404-04
Sample Matrix: Soil

			Metals Analy	yses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.5	mg/Kg dry	l		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Arsenic	7.3	3.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЛН
Barium	110	3.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Beryllium	0.66	0.35	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Cadmium	0.42	0.35	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Chromium	14	0.70	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Lead	71	1.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Mercury	0.10	0.055	mg/Kg dry	i		SW-846 7471B	11/26/19	11/27/19 9:56	CJV
Nickel	11	0.70	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Selenium	ND	7.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Silver	ND	0.70	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Thallium	ND	3.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Vanadium	38	1.4	mg/Kg dry	Ĭ		SW-846 6010D	11/26/19	11/27/19 3:39	МЈН
Zinc	63	1.4	mg/Kg dry	l		SW-846 6010D	11/26/19	11/27/19 16:57	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 Field Sample #: HB-20

Sampled: 11/21/2019 09:00

Sample ID: 19K1404-04 Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		46.3		% Wt	1		SM 2540G	11/25/19	11/26/19 10:38	adb

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-22

Sampled: 11/21/2019 10:30

Sample ID: 19K1404-05 Sample Matrix: Soil

			Semivolatile Organic C	ompounds b	y GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Acenaphthylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Acetophenone	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Aniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Anthracene	ND	0.32	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzidine	ND	1.2	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(a)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(a)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(b)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(g,h,i)perylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(k)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzoic Acid	ND	1.9	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Bis(2-chloroethoxy)methane	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Bis(2-chloroethyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Bis(2-chloroisopropyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Bromophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
sutylbenzylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Carbazole	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Chloroaniline	ND	1.2	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Chloronaphthalene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Chlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Chlorophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Chrysene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Dibenz(a,h)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Dibenzofuran	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Di-n-butylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,2-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,3-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,4-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
3,3-Dichlorobenzidine	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4-Dichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Diethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4-Dimethylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Dimethylphthalate	ND	0.63	mg/Kg dry	Ĭ		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4,6-Dinitro-2-methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4-Dinitrotoluene	ND	0.63	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,6-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
i-n-octylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Fluorene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
	IND	0.52	ing its dry	•		2		D 00	-4.04



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Pate Received: 11/22/2019 ield Sample #: HB-22

Sampled: 11/21/2019 10:30

Sample ID: 19K1404-05
Sample Matrix: Soil

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0,63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Hexachlorobutadiene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Hexachlorocyclopentadiene	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Hexachloroethane	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Indeno(1,2,3-cd)pyrene	ND	0.32	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Isophorone	ND	0.63	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
3/4-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Naphthalene	ND	0.32	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
3-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Nitrobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Nitrophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Nitrophenol	ND	1.2	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
N-Nitrosodimethylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
.4-Nitrosodiphenylamine/Diphenylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
N-Nitrosodi-n-propylamine	ND	0.63	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Pentachloronitrobenzene	ND	0.63	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Pentachlorophenol	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Phenanthrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Phenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Pyridine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,2,4-Trichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4,5-Trichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4,6-Trichlorophenol	ND	0,63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
2-Fluorophenol		69.7	30-130					11/27/19 23:49	
Phenol-d6		72.7	30-130					11/27/19 23:49	
Nitrobenzene-d5		72.5	30-130					11/27/19 23:49 11/27/19 23:49	
2-Fluorobiphenyl		76.8	30-130 30-130					11/27/19 23:49	
2,4,6-Tribromophenol p-Terphenyl-d14		81.4 105	30-130					11/27/19 23:49	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-22

Sampled: 11/21/2019 10:30

Sample ID: 19K1404-05

Sample Matrix: Soil

Outro Water. Con			Metals Analy	ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Arsenic	5.4	3.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Barium	70	3.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Beryllium	0.81	0.32	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Cadmium	0.41	0.32	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Chromium	13	0.63	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Lead	45	0.95	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Mercury	0.11	0.045	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:57	CJV
Nickel	10	0.63	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Selenium	ND	6.3	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Silver	ND	0.63	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Thallium	ND	3.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Vanadium	41	1.3	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	МЈН
Zinc	91	1.3	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:14	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 Field Sample #: HB-22

Sampled: 11/21/2019 10:30

Sample ID: 19K1404-05
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		53.7		% Wı	1		SM 2540G	11/25/19	11/26/19 10:39	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Jate Received: 11/22/2019
Field Sample #: HB-23

Sampled: 11/21/2019 11:30

Sample ID: 19K1404-06
Sample Matrix: Soil

Semivolatile	Organic	Compounds	by	GC/MS
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Acenaphthylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Acetophenone	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Aniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzidine	ND	1.2	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(a)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(a)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(b)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(g,h,i)perylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(k)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzoic Acid	ND	1.9	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Bis(2-chloroethoxy)methane	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Bis(2-chloroethyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Bis(2-chloroisopropyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.63	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Bromophenylphenylether	ND	0.63	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
utylbenzylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Carbazole	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Chloroaniline	ND	1.2	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Chloronaphthalene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Chlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Chlorophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Chrysene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Dibenz(a,h)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Dibenzofuran	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Di-n-butylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,2-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,3-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,4-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
3,3-Dichlorobenzidine	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4-Dichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Diethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4-Dimethylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Dimethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4,6-Dinitro-2-methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,6-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Di-n-octylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Fluorene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB

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Work Order: 19K1404



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL, 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Date Received: 11/22/2019 Field Sample #: HB-23 Sample ID: 19K1404-06

Sample Matrix: Soil

Sampled: 11/21/2019 11:30

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0,63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Hexachlorobutadiene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Hexachlorocyclopentadiene	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Hexachloroethane	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Indeno(1,2,3-cd)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Isophorone	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
I-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
3/4-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Naphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
3-Nitroaniline	ND	0.63	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Nitrobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Nitrophenol	ND	0.63	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Nitrophenol	ND	1.2	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
N-Nitrosodimethylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
N-Nitrosodi-n-propylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Pentachloronitrobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Pentachlorophenol	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Phenanthrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Phenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Ругепе	ND	0.32	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Pyridine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,2,4-Trichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4,5-Trichlorophenol	ND	0.63	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4,6-Trichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Surrogates		% Recovery	Recovery Limits	5	Flag/Qual			- Annual Control Contr	
2-Fluorophenol		67.3	30-130					11/28/19 0:11	
Phenol-d6		68.6	30-130					11/28/19 0:11	
Nitrobenzene-d5		69.7	30-130					11/28/19 0:11	
2-Fluorobiphenyl		69.9	30-130					11/28/19 0:11	
2,4,6-Tribromophenol		73.9	30-130					11/28/19 0:11	
p-Terphenyl-d14		94.6	30-130					11/28/19 0:11	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-23

Sampled: 11/21/2019 11:30

Sample ID: 19K1404-06
Sample Matrix: Soil

			7.1.						
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	МЈН
Arsenic	4.9	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	МЈН
Barium	70	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Beryllium	0.81	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	МЈН
Cadmium	0.45	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	МЈН
Chromium	13	0.61	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Lead	44	0.91	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	МЈН
Mercury	0.11	0.047	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:59	CJV
Nickel	10	0.61	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Selenium	ND	6.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Silver	ND	0.61	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Thallium	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Vanadium	41	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	МЈН
Zinc	90	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:19	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 Field Sample #: HB-23

Sampled: 11/21/2019 11:30

Sample ID: 19K1404-06
Sample Matrix: Soil

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	53.5		% Wt	1		SM 2540G	11/25/19	11/26/19 10:39	adb

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-24

Sampled: 11/21/2019 12:30

Sample ID: 19K1404-07
Sample Matrix: Soil

			Semivolatile Organic C	ompounds b	y GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Acenaphthylene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Acetophenone	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Aniline	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Anthracene	ND	0.23	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzidine	ND	0.91	mg/Kg dry	ı	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(a)anthracene	0.51	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(a)pyrene	0.53	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(b)fluoranthene	0.75	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(g,h,i)perylene	0.32	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(k)fluoranthene	0.29	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzoic Acid	ND	1.4	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Bis(2-chloroethoxy)methane	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Bis(2-chloroethyl)ether	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Bis(2-chloroisopropyl)ether	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Bis(2-Ethylhexyl)phthalate	3.5	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Bromophenylphenylether	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Butylbenzylphthalate	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Carbazole	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Chloroaniline	ND	0.91	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Chloro-3-methylphenol	ND	0.91	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Chloronaphthalene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Chlorophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Chlorophenylphenylether	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Chrysene	0.63	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Dibenz(a,h)anthracene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Dibenzofuran	ND	0.47	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Di-n-butylphthalate	ND	0.47	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,2-Dichlorobenzene	ND	0.47	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,3-Dichlorobenzene	ND	0.47	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,4-Dichlorobenzene	ND	0.47	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
3,3-Dichlorobenzidine	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4-Dichlorophenol	ND	0.47	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Diethylphthalate	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4-Dimethylphenol	ND	0.47	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Dimethylphthalate	ND	0.47	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4,6-Dinitro-2-methylphenol	ND	0.47	mg/Kg dry	ì		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4-Dinitrophenol	ND	0.91	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4-Dinítrotoluene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,6-Dinitrotoluene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Di-n-octylphthalate	ND	0.47	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Fluoranthene	0.97	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Fluorene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB



Project Location: Beaver St., Waltham, MA

85.6

30-130

Sample Description:

Work Order: 19K1404

)ate Received: 11/22/2019 rield Sample #: HB-24

Sampled: 11/21/2019 12:30

Sample ID: 19K1404-07

p-Terphenyl-d14

Sample Matrix: Soil		Sem	ivolatile Organic Co	mpounds by	GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analys
Hexachlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Hexachlorobutadiene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Hexachlorocyclopentadiene	ND	0.47	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Hexachloroethane	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Indeno(1,2,3-cd)pyrene	0.38	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Isophorone	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
I-Methylnaphthalene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Methylnaphthalene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Methylphenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
3/4-Methylphenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Naphthalene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Nitroaniline	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
3-Nitroaniline	ND	0.47	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Nitroaniline	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Nitrobenzene	ND	0.47	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Nitrophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Nitrophenol	ND	0.91	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
N-Nitrosodimethylamine	ND	0.47	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.47	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
N-Nitrosodi-n-propylamine	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Pentachloronitrobenzene	ND	0.47	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Pentachlorophenol	ND	0.47	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Phenanthrene	0.55	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Phenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Pyrene	1.2	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Pyridine	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,2,4-Trichlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4,5-Trichlorophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4,6-Trichlorophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Surrogates		% Recovery	Recovery Limits	· · · · · · · · · · · · · · · · · · ·	Flag/Qual				
2-Fluorophenol		63.5	30-130		and the second s			11/28/19 0:34	
Phenol-d6		66.4	30-130					11/28/19 0:34	
Nitrobenzene-d5		63.2	30-130					11/28/19 0:34	
2-Fluorobiphenyl		66.2 75.6	30-130 30-130					11/28/19 0:34 11/28/19 0:34	
2,4,6-Tribromophenol		7.5,0	30-130					11/20/19 0.34	

11/28/19 0:34



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-24

Sampled: 11/21/2019 12:30

Sample ID: 19K1404-07
Sample Matrix: Soil

		-	Metals Analy	yses (Total)					
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Antimony	ND	2.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	МЈН
Arsenic	5.6	2.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	МЛН
Barium	40	2.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	МЈН
Beryllium	0.31	0.24	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Cadmium	0.45	0.24	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	МЈН
Chromium	27	0.48	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	МЈН
Lead	290	0.72	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	МЈН
Mercury	0.095	0.034	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 10:00	CJV
Nickel	14	0.48	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Selenium	ND	4.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Silver	ND	0.48	mg/Kg dry	ı		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Thallium	ND	2.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Vanadium	31	0.95	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	МЈН
Zinc	100	0.95	mg/Kg dry	I		SW-846 6010D	11/26/19	11/27/19 17:24	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-24

Sampled: 11/21/2019 12:30

Sample ID: 19K1404-07
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		70.8		% Wt	i		SM 2540G	11/25/19	11/26/19 10:39	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 Field Sample #: HB-25

Sampled: 11/21/2019 13:00

Fluorene

ND

0.30

mg/Kg dry

1

Sample ID: 19K1404-08 Sample Matrix: Soil Semivolatile Organic Compounds by GC/MS Date Date/Time RL Results Units Dilution Flag/Qual Analyte Method Prepared Analyzed Analyst Acenaphthene ND 0.30 mg/Kg dry SW-846 8270D-E 11/24/19 ı 11/28/19 0:56 KLB Acenaphthylene ND 0.30 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLR Acetophenone ND 0.59 SW-846 8270D-E 11/24/19 11/28/19 0:56 mg/Kg dry 1 KLB Aniline ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Anthracene ND 0.30 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Benzidine ND V-04, V-05, V-35 SW-846 8270D-E 11/24/19 11/28/19 0:56 1.1 mg/Kg dry KLB Benzo(a)anthracene ND 0.30 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Benzo(a)pyrene ND 0.30 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Benzo(b)fluoranthene ND 0.30 mg/Kg dry I SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Benzo(g,h,i)perylene ND 0.30 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Benzo(k)fluoranthene ND SW-846 8270D-E 0.30 mg/Kg dry 1 11/24/19 11/28/19 0:56 KLB Benzoic Acid SW-846 8270D-E ND 1.7 1 L-04 11/24/19 11/28/19 0:56 KLB mg/Kg dry Bis(2-chloroethoxy)methane ND 0.59 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB mg/Kg dry Bis(2-chloroethyl)ether ND 0.59 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB mg/Kg dry Bis(2-chloroisopropyl)ether ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Bis(2-Ethylhexyl)phthalate ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 4-Bromophenylphenylether ND 0.59 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB mg/Kg dry Butylbenzylphthalate ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Carbazole ND 0.30 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 4-Chloroaniline ND 1.1 mg/Kg dry 1 V-34 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 4-Chloro-3-methylphenol SW-846 8270D-E 11/24/19 ND 1.1 1 11/28/19 0:56 KLB mg/Kg dry 2-Chloronaphthalene SW-846 8270D-E ND 0.59 11/24/19 11/28/19 0:56 KI.B mg/Kg dry 1 2-Chlorophenol ND 0.59 SW-846 8270D-E 11/24/19 11/28/19 0:56 1 KLB mg/Kg dry 4-Chlorophenylphenylether ND 0.59 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB mg/Kg dry 1 Chrysene ND 0.30 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Dibenz(a,h)anthracene SW-846 8270D-E 11/24/19 11/28/19 0:56 ND 0.30 mg/Kg dry KLB Dibenzofuran ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Di-n-butylphthalate ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 1,2-Dichlorobenzene ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 1.3-Dichlorobenzene ND 0.59 mg/Kg dry ì SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 1.4-Dichlorobenzene SW-846 8270D-E 11/24/19 ND 0.59 mg/Kg dry 1 11/28/19 0:56 KI.B 3,3-Dichlorobenzidine ND SW-846 8270D-E 11/24/19 11/28/19 0:56 0.30 1 KLB mg/Kg dry 2,4-Dichlorophenol ND 0.59 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB mg/Kg dry Diethylphthalate ND 0.59 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 1 mg/Kg dry 2,4-Dimethylphenol ND 0.59 mg/Kg dry SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 1 Dimethylphthalate ND 0.59 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB mg/Kg dry 4,6-Dinitro-2-methylphenol SW-846 8270D-E 11/24/19 11/28/19 0:56 ND 0.59 mg/Kg dry 1 KLB 2,4-Dinitrophenol ND SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB 1.1 mg/Kg dry 1 2,4-Dinitrotoluene ND 0.59 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB mg/Kg dry 2,6-Dinitrotoluene ND 0.59 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB mg/Kg dry Di-n-octylphthalate ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB ,2-Diphenylhydrazine/Azobenzene ND 0.59 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB Fluoranthene SW-846 8270D-E 11/24/19 11/28/19 0:56 KLB ND 0.30 mg/Kg dry 1

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KLB

11/28/19 0:56

SW-846 8270D-E

11/24/19



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 Field Sample #: HB-25 Sample ID: 19K1404-08

Sampled: 11/21/2019 13:00

Sample Matrix: Soil Semivolatile Organic Compounds by GC/MS

		Sem	ivolatile Organic C	ompounds by	GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.59	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Hexachlorobutadiene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Hexachlorocyclopentadiene	ND	0.59	mg/Kg dry	Į.	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Hexachloroethane	ND	0.59	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Indeno(1,2,3-cd)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Isophorone	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Methylphenol	ND	0.59	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
3/4-Methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Naphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Nitroaniline	ND	0.59	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
3-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Nitrobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Nitrophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
N-Nitrosodimethylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
N-Nitrosodi-n-propylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Pentachloronitrobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Pentachiorophenol	ND	0.59	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Phenanthrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Phenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Pyridine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1,2,4-Trichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,4,5-Trichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,4,6-Trichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
2-Fluorophenol		50.8	30-130					11/28/19 0:56	
Phenol-d6		52.3	30-130					11/28/19 0:56	
Nitrobenzene-d5		52.2	30-130					11/28/19 0:56	
2-Fluorobiphenyl		53.5	30-130					11/28/19 0:56	
2,4,6-Tribromophenol		56.9	30-130					11/28/19 0:56	
p-Terphenyl-d14		67.9	30-130					11/28/19 0:56	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-25

Sampled: 11/21/2019 13:00

Sample ID: 19K1404-08
Sample Matrix: Soil

			Metals Analy	ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Arsenic	7.4	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Barium	85	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Beryllium	0.67	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Cadmium	0.32	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Chromium	14	0.59	mg/Kg dry	ı		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Lead	73	0.89	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Mercury	0.21	0.042	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 10:02	CJV
Nickel	11	0.59	mg/Kg dry	I		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Selenium	ND	5.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Silver	ND	0.59	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Thallium	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Vanadium	45	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	МЈН
Zinc	53	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:30	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-25

Sampled: 11/21/2019 13:00

Sample ID: 19K1404-08
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		56.8		% Wı	1		SM 2540G	11/25/19	11/26/19 10:46	adb



Project Location: Beaver St., Waltham, MA

Sample Description: Work Order: 19K1404

Date Received: 11/22/2019 ield Sample #: HB-26

Sampled: 11/21/2019 13:30

Sample ID: 19K1404-09 Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Acenaphthylene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Acetophenone	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Aniline	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzidine	ND	1.1	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(a)anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(a)pyrene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(b)fluoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(g,h,i)perylene	ND	0.27	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(k)fluoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzoic Acid	ND	1.6	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Bis(2-chloroethoxy)methane	ND	0.55	mg/Kg dry	ì		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Bis(2-chloroethyl)ether	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Bis(2-chloroisopropyl)ether	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.55	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Bromophenylphenylether	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Butylbenzylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
arbazole	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Chloroaniline	ND	1.1	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Chloro-3-methylphenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Chloronaphthalene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Chlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Chlorophenylphenylether	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Chrysene	ND	0.27	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Dibenz(a,h)anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Dibenzofuran	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Di-n-butylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,2-Dichlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,3-Dichlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,4-Dichlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,3-Dichlorobenzidine	ND	0.27	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,4-Dichlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Diethylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,4-Dimethylphenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Dimethylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,6-Dinitro-2-methylphenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,4-Dinitrophenol	ND	1.1	mg/Kg dry	1	V-20, V-04	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,4-Dinitrotoluene	ND	0.55	mg/Kg dry	1	*	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
,6-Dinitrotoluene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
)i-n-octylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Diphenylhydrazine/Azobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
luoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
luorene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Sampled: 11/21/2019 13:30 Field Sample #: HB-26

Sample ID: 19K1404-09 Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

					,				
	D	n.	WT . **.	D. 11	F1 (0 )	34.45.3	Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Hexachlorobutadiene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Hexachlorocyclopentadiene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Hexachioroethane	ND	0.55	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Indeno(1,2,3-cd)pyrene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Isophorone	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1-Methylnaphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Methylnaphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Methylphenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
3/4-Methylphenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Naphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Nitroaniline	ND	0.55	mg/Kg dry	i	V-35	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
3-Nitroaniline	ND	0.55	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Nitroaniline	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Nitrobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Nitrophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
N-Nitrosodimethylamine	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
N-Nitrosodi-n-propylamine	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Pentachloronitrobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Pentachlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Phenanthrene	ND	0.27	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Phenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Рутепе	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Pyridine	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1,2,4-Trichlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,4,5-Trichlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,4,6-Trichlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Surrogates		% Recovery	Recovery Limit	S	Flag/Qual				
2-Fluorophenol		67.7	30-130					11/27/19 23:58	
Phenol-d6		69.9	30-130					11/27/19 23:58	
Nitrobenzene-d5		68.8	30-130					11/27/19 23:58	
2-Fluorobiphenyl		72.0	30-130					11/27/19 23:58	
2,4,6-Tribromophenol		76.6	30-130					11/27/19 23:58	
p-Terphenyl-d14		76.1	30-130					11/27/19 23:58	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-26

Sampled: 11/21/2019 13:30

Sample ID: 19K1404-09
Sample Matrix: Soil

Odinoto Maria. Ook			Metals Analy	ses (Total)			,		
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Arsenic	4.7	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Barium	62	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Beryllium	0.76	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Cadmium	0.39	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Chromium	12	0.54	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Lead	42	0.81	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Mercury	0.11	0.041	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 10:04	CJV
Nickel	8.9	0.54	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Selenium	ND	5.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Silver	ND	0.54	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Thallium	ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Vanadium	37	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	МЈН
Zinc	79	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:35	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Pate Received: 11/22/2019 Field Sample #: HB-26

Sampled: 11/21/2019 13:30

Sample ID: 19K1404-09
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		60.7		% Wı	1		SM 2540G	11/25/19	11/26/19 10:47	adb

Work Order: 19K1404



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Pate Received: 11/22/2019 Field Sample #: HB-27 Sample ID: 19K1404-10

Sample Matrix: Soil

Sampled: 11/21/2019 14:30

## Semivolatile Organic Compounds by GC/MS

Amabuta	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Analyte Acenaphthene	ND	0.28	mg/Kg dry	l	riag/Quai	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Acenaphthylene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Acetophenone	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Aniline	ND	0.56	mg/Kg dry	1	•	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzidine	ND	1.1	mg/Kg dry	ı	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(a)anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(a)pyrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(b)fluoranthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(g,h,i)perylene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(k)fluoranthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzoic Acid	ND	1.6	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Bis(2-chloroethoxy)methane	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Bis(2-chloroethyl)ether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Bis(2-chloroisopropyl)ether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Bromophenylphenylether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Butylbenzylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Larbazole	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Chloroaniline	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Chloro-3-methylphenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2-Chloronaphthalene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2-Chlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Chlorophenylphenylether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Chrysene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Dibenz(a,h)anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Dibenzofuran	ND	0.56	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Di-n-butylphthalate	ND	0.56	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,2-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,3-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,4-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
3,3-Dichlorobenzidine	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4-Dichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Diethylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4-Dimethylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Dimethylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4,6-Dinitro-2-methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4-Dinitrophenol	ND	1.1	mg/Kg dry	1	V-04, V-20	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4-Dinitrotoluene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,6-Dinitrotoluene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Di-n-octylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
,2-Diphenylhydrazinc/Azobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Fluoranthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Fluorene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Jate Received: 11/22/2019

Field Sample #: HB-27

Sampled: 11/21/2019 14:30

Sample ID: 19K1404-10
Sample Matrix: Soil

Sample Matrix: Soil Semivolatile Organic Compounds by GC/MS											
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst		
Hexachlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Hexachlorobutadiene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Hexachlorocyclopentadiene	ND	0.56	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Hexachloroethane	ND	0.56	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Indeno(1,2,3-cd)pyrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Isophorone	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
1-Methylnaphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
2-Methylnaphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
2-Methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
3/4-Methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Naphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
2-Nitroaniline	ND	0.56	mg/Kg dry	1	V-35	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
3-Nitroaniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
4-Nitroaniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Nitrobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
2-Nitrophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
N-Nitrosodimethylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
N-Nitrosodiphenylamine/Diphenylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
N-Nitrosodi-n-propylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Pentachloronitrobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Pentachlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Phenanthrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Phenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Pyrene	ND	0.28	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Pyridine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
1,2,4,5-Tetrachlorobenzene	ND	0.56	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
1,2,4-Trichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
2,4,5-Trichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
2,4,6-Trichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL		
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual						
2-Fluorophenol		54.4	30-130					11/28/19 0:22			
Phenol-d6		57.9	30-130					11/28/19 0:22			
Nitrobenzene-d5		56.2	30-130					11/28/19 0:22			
2-Fluorobiphenyl		59.8	30-130					11/28/19 0:22			
2,4,6-Tribromophenol		64.1	30-130					11/28/19 0:22 11/28/19 0:22			
p-Terphenyl-d14		64.4	30-130					11/20/19 0:22			



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019 Field Sample #: HB-27

Sampled: 11/21/2019 14:30

Sample ID: 19K1404-10 Sample Matrix: Soil

Metals Ana										
An	alyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	2.7	mg/Kg dry	1	****	SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Arsenic		4.9	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Barium		66	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Beryllium		0.83	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Cadmium		0.40	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Chromium		12	0.55	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Lead		42	0.82	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Mercury		0.12	0.039	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 10:05	CJV
Nickel		9.3	0.55	mg/Kg dry	i		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Selenium		ND	5.5	mg/Kg dry	l		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Silver		ND	0.55	mg/Kg dry	ì		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Thallium		ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Vanadium		38	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	МЈН
Zinc		84	1.1	mg/Kg dry	i		SW-846 6010D	11/26/19	11/27/19 17:40	TBC



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019
Field Sample #: HB-27

Sampled: 11/21/2019 14:30

Sample ID: 19K1404-10
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		59.9		% Wı	ı		SM 2540G	11/25/19	11/26/19 10:47	adb



## Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
19K1404-01 [HB-16]	B246947	11/25/19
19K1404-02 [HB-17]	B246947	11/25/19
19K1404-03 [HB-19]	B246947	11/25/19
19K1404-04 [HB-20]	B246947	11/25/19
19K1404-05 [HB-22]	B246947	11/25/19
19K1404-06 [HB-23]	B246947	11/25/19
19K1404-07 [HB-24]	B246947	11/25/19
19K1404-08 [HB-25]	B246947	11/25/19
19K1404-09 [HB-26]	B246947	11/25/19
19K1404-10 [HB-27]	B246947	11/25/19

Prep Method: SW-846 3050B-SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19K1404-01 [HB-16]	B247118	1.49	50.0	11/26/19	
19K1404-02 [HB-17]	B247118	1.52	50.0	11/26/19	
19K1404-03 [HB-19]	B247118	1.51	50.0	11/26/19	
19K1404-04 [HB-20]	B247118	1.55	50.0	11/26/19	
19K1404-05 [HB-22]	B247118	1.47	50.0	11/26/19	
19K1404-06 [HB-23]	B247118	1.54	50.0	11/26/19	
19K1404-07 [HB-24]	B247118	1.48	50.0	11/26/19	
19K1404-08 [HB-25]	B247118	1.48	50.0	11/26/19	
[1404-09 [HB-26]	B247118	1.52	50.0	11/26/19	
ıУК1404-10 [HB-27]	B247118	1.53	50.0	11/26/19	

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19K1404-01 [HB-16]	B247114	0.617	50.0	11/26/19	
19K1404-02 [HB-17]	B247114	0.582	50.0	11/26/19	
19K1404-03 [HB-19]	B247114	0.588	50.0	11/26/19	
19K1404-04 [HB-20]	B247114	0.586	50.0	11/26/19	
19K1404-05 [HB-22]	B247114	0.623	50.0	11/26/19	
19K1404-06 [HB-23]	B247114	0.598	50.0	11/26/19	
19K1404-07 [HB-24]	B247114	0.619	50.0	11/26/19	
19K1404-08 [HB-25]	B247114	0.629	50.0	11/26/19	
19K1404-09 [HB-26]	B247114	0.606	50.0	11/26/19	
19K1404-10 [HB-27]	B247114	0.639	50.0	11/26/19	

Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final (mL)	Date	
19K1404-01 [HB-16]	B246869	30.1	1.00	11/24/19	
19K1404-02 [HB-17]	B246869	30.5	1.00	11/24/19	
19K1404-03 [HB-19]	B246869	30.3	1.00	11/24/19	
19K1404-04 [HB-20]	B246869	30.4	1.00	11/24/19	
19K1404-05 [HB-22]	B246869	30.1	1.00	11/24/19	
`K1404-06 [HB-23]	B246869	30.1	1.00	11/24/19	
1404-07 [HB-24]	B246869	30.7	1.00	11/24/19	
19K1404-08 [HB-25]	B246869	30.4	1.00	11/24/19	
19K1404-09 [HB-26]	B246869	30.7	1.00	11/24/19	



## Sample Extraction Data

Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial (g)	Final (mL)	Date
19K1404-10 [HB-27]	B246869	30.6	1.00	11/24/19



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 **QUALITY CONTROL**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
Blank (B246869-BLK1)			j	Prepared: 11/	/24/19 Analy:	zed: 11/27/19	)			
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzidine	ND	0.66	mg/Kg wet							V-04, V-05, V-35
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Benzoic Acid	ND	1.0	mg/Kg wet							L-04
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether Butylbenzylphthalate	ND ND	0.34 0.34	mg/Kg wet mg/Kg wet							
Butylbenzylphthalate Carbazole	ND ND	0.34 0.17	mg/Kg wet mg/Kg wet							
Carbazole  Chloroaniline	ND ND	0.17	mg/Kg wet mg/Kg wet							V-34
Chloroaniline Chloro-3-methylphenol	ND ND	0.66 0.66	mg/Kg wet mg/Kg wet							+-J <del>* </del>
2-Chloronaphthalene	ND ND	0.66	mg/Kg wet							
2-Chlorophenol	ND ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND ND	0.34	mg/Kg wet							
4-Chrysene Chrysene	ND ND	0.34	mg/Kg wet							
Dibenz(a,h)anthracene	ND ND	0.17	mg/Kg wet							
Dibenzofuran	ND ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wei							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
1,2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							***=
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet							V-05
Hexachloroethane	ND	0.34	mg/Kg wet							
deno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
sophorone	ND	0.34	mg/Kg wet							
I-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
Blank (B246869-BLK1)				Prepared: 11.	/24/19 Analy	/zed: 11/27/1	9			
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.34	mg/Kg wet							
3-Nitroaniline	ND	0.34	mg/Kg wet							
4-Nitroaniline	ND	0.34	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							
N-Nitrosodimethylamine	ND	0.34	mg/Kg wet							
N-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
Pentachloronitrobenzene	ND	0.34	mg/Kg wet							
Pentachlorophenol	ND	0.34	mg/Kg wet							V-05
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Pyridine	ND	0.34	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	5.51		mg/Kg wet	6.67		82.7	30-130			
Surrogate: Phenol-d6	5.60		mg/Kg wet	6.67		84.1	30-130			
Surrogate: Nitrobenzene-d5	2.58		mg/Kg wet	3.33		77.5	30-130			
Surrogate: 2-Fluorobiphenyl	2.76		mg/Kg wet	3.33		82.9 87.5	30-130 30-130			
Surrogate: 2,4,6-Tribromophenol	5.84 3.14		mg/Kg wet mg/Kg wet	6.67 3.33		87.5 94.3	30-130			
Surrogate: p-Terphenyl-d14	5.14		mg/kg wet	3.33		74.5	30-130			
LCS (B246869-BS1)					/24/19 Analy					
Acenaphthene	1.09	0.17	mg/Kg wet	1.67		65.7	40-140			
Acenaphthylene	1.17	0.17	mg/Kg wet	1.67		70.0	40-140			
Acetophenone	1.11	0.34	mg/Kg wet	1.67		66.6	40-140			
Aniline	0.809	0.34	mg/Kg wet	1.67		48.5	10-140			
Anthracene	1.25	0.17	mg/Kg wet mg/Kg wet	1.67		75.0	40-140 40-140			V-04, V-05, V-3
Benzidine	1.85	0.66		1.67		111				
Benzo(a)anthracene	1.20	0.17 0.17	mg/Kg wet mg/Kg wet	1.67		72.2 70.2	40-140 40-140			
Senzo(a)pyrene	1.17	0.17	mg/Kg wet	1.67 1.67		70.2	40-140			
Benzo(b)fluoranthene Benzo(g,h,i)perylene	1.18	0.17	mg/Kg wet	1.67		68.8	40-140			
senzo(g,n,1)peryiene Senzo(k)fluoranthene	1.15 1.21	0.17	mg/Kg wet	1.67		72.3	40-140			
Benzoic Acid	0.179	1.0	mg/Kg wet	1.67		10.7 *	30-130			L-04
is(2-chloroethoxy)methane	0.179 1.11	0.34	mg/Kg wet	1.67		66.6	40-140			2-04
Bis(2-chloroethyl)ether	1.04	0.34	mg/Kg wet	1.67		62.4	40-140			
Bis(2-chloroisopropyl)ether	1,13	0.34	mg/Kg wet	1.67		67.6	40-140			
lis(2-Ethylhexyl)phthalate	1.13	0.34	mg/Kg wet	1.67		74.2	40-140			
-Bromophenylphenylether	1.24	0.34	mg/Kg wet	1.67		70.3	40-140			
lutylbenzylphthalate	1.17	0.34	mg/Kg wet	1.67		73.6	40-140			
rbazole	1.20	0.17	mg/Kg wet	1.67		72.3	40-140			
Chloroaniline	0.893	0.66	mg/Kg wet	1.67		53.6	10-140			V-34
-Chloro-3-methylphenol	1.23	0.66	mg/Kg wet	1.67		73.7	30-130			



#### QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
atch B246869 - SW-846 3546										
.CS (B246869-BS1)				Prepared: 11	/24/19 Analy	yzed: 11/27/1	9			
-Chlorophenol	1.11	0.34	mg/Kg wet	1.67		66.4	30~130			
-Chlorophenylphenylether	1.16	0.34	mg/Kg wet	1.67		69.4	40-140			
hrysene	1.19	0.17	mg/Kg wet	1.67		71.2	40-140			
ibenz(a,h)anthracene	1.14	0.17	mg/Kg wet	1.67		68.5	40-140			
ribenzofuran	1.20	0.34	mg/Kg wet	1.67		71.8	40-140			
i-n-butylphthalate	1.24	0.34	mg/Kg wet	1.67		74.2	40-140			
2-Dichlorobenzene	1.02	0.34	mg/Kg wet	1.67		61.1	40-140			
3-Dichlorobenzene	0.991	0.34	mg/Kg wet	1.67		59.5	40-140			
4-Dichlorobenzene	0.995	0.34	mg/Kg wet	1.67		59.7	40-140			
3-Dichlorobenzidine	0.946	0.17	mg/Kg wet	1.67		56.8	20-140			
4-Dichlorophenol	1.13	0.34	mg/Kg wet	1.67		67.6	30-130			
iethylphthalate	1.16	0.34	mg/Kg wet	1.67		69.8	40-140			
4-Dimethylphenol	1.01	0.34	mg/Kg wet	1.67		60.8	30-130			
imethylphthalate	1.16	0.34	mg/Kg wet	1.67		69.7	40-140			
6-Dinitro-2-methylphenol	1.09	0.34	mg/Kg wet	1.67		65.5	30-130			
4-Dinitrophenol	0.601	0.66	mg/Kg wet	1.67		36.1	30-130			
4-Dinitrotoluene	1.30	0.34	mg/Kg wet	1.67		78.1	40-140			
6-Dinitrotoluene	1.32	0.34	mg/Kg wet	1.67		79.4	40-140			
i-n-octylphthalate	1.29	0.34	mg/Kg wet	1.67		77.4	40-140			
2-Diphenylhydrazine/Azobenzene	1.24	0.34	mg/Kg wet	1.67		74.1	40-140			
oranthene	1.25	0.17	mg/Kg wet	1.67		75.0	40-140			
uorene	1.20	0.17	mg/Kg wet	1.67		71.8	40-140			
exachlorobenzene	1.25	0.34	mg/Kg wet	1.67		75.1	40-140			
exachlorobutadiene	0.990	0.34	mg/Kg wet	1.67		59.4	40-140			
exachlorocyclopentadiene	0.692	0.34	mg/Kg wet	1.67		41.5	40-140			V-05
exachloroethane	1.01	0.34	mg/Kg wet	1.67		60.7	40-140			
deno(1,2,3-cd)pyrene	1.24	0.17	mg/Kg wet	1.67		74.6	40-140			
ophorone	1.16	0.34	mg/Kg wet	1.67		69.8	40-140			
Methylnaphthalene	1.01	0.17	mg/Kg wet	1.67		60.5	40-140			
Methylnaphthalene	1.21	0.17	mg/Kg wet	1.67		72.5	40-140			
Methylphenol	1.08	0.34	mg/Kg wet	1.67		64.9	30-130			
4-Methylphenol	1.15	0.34	mg/Kg wet	1.67		69.1	30-130			
aphthalene	1.09	0.17	mg/Kg wet	1.67		65.3	40-140			
Nitroaniline	1.30	0.34	mg/Kg wet	1.67		77.8	40-140			
Nitroaniline	1.21	0.34	mg/Kg wet	1.67		72.7	30-140			
Nitroaniline	1.33	0.34	mg/Kg wet	1.67		79.6	40-140			
itrobenzene	1.13	0.34	mg/Kg wet	1.67		67.6	40-140			
Nitrophenol	1.26	0.34	mg/Kg wet	1.67		75.9	30-130			
Nitrophenol	1.39	0.66	mg/Kg wet	1.67		83.4	30-130			
-Nitrosodimethylamine	0.944	0.34	mg/Kg wet	1.67		56.7	40-140			
-Nitrosodiphenylamine/Diphenylamine	1.27	0.34	mg/Kg wet	1.67		76.2	40-140			
-Nitrosodi-n-propylamine	1.11	0.34	mg/Kg wet	1.67		66.8	40-140			
entachloronitrobenzene	1.29	0.34	mg/Kg wet	1.67		77.2	40-140			
ntachlorophenol	0.791	0.34	mg/Kg wet	1.67		47.4	30-130			V-05
enanthrene	1,24	0.17	mg/Kg wet	1.67		74.4	40-140			
enol	1.22	0.34	mg/Kg wet	1.67		73.1	30-130			
rene	1.21	0.17	mg/Kg wet	1.67		72.7	40-140			
ridine	0.632	0.34	mg/Kg wet	1.67		37.9	30-140			
2,4,5-Tetrachlorobenzene	1.04	0.34	mg/Kg wet	1.67		62.5	40-140			
2,4-Trichlorobenzene	1.03	0.34	mg/Kg wet	1.67		61.9	40-140			
4,5-Trichlorophenol	1.26	0.34 0.34	mg/Kg wet mg/Kg wet	1.67		75.6	30-130			



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 QUALITY CONTROL

	<b>.</b> .	Reporting	11-7-	Spike	Source	0/000	%REC	RPD	RPD	Not	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	KYD	Limit	Notes	L
Batch B246869 - SW-846 3546								<del></del>			
LCS (B246869-BS1)				Prepared: 11	1/24/19 Analy	/zcd: 11/27/1	9				==
Surrogate: 2-Fluorophenol	4.87		mg/Kg wet	6.67		73.1	30-130				
Surrogate: Phenol-d6	5.00		mg/Kg wet	6.67		75.1	30-130				
Surrogate: Nitrobenzene-d5	2.33		mg/Kg wet	3.33		69.9	30-130				
Surrogate: 2-Fluorobiphenyl	2.47		mg/Kg wet	3.33		74.0	30-130				
Surrogate: 2,4,6-Tribromophenol	6.16		mg/Kg wet	6.67		92.4	30-130				
Surrogate: p-Terphenyl-d14	2.80		mg/Kg wet	3.33		83.9	30-130				
LCS Dup (B246869-BSD1)				Prepared: 11	/24/19 Analy	/zed: 11/27/1	9				
Acenaphthene	1.14	0.17	mg/Kg wet	1.67		68.5	40-140	4.26	30		
Acenaphthylene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	2.26	30		
Acetophenone	1.22	0.34	mg/Kg wet	1.67		73.4	40-140	9.71	30		
Aniline	0.956	0.34	mg/Kg wet	1.67		57.4	10-140	16.7	50		† ‡
Anthracene	1.29	0.17	mg/Kg wet	1.67		77.3	40-140	2.97	30		
Benzidine	1.92	0.66	mg/Kg wet	1.67		115	40-140	4.03	30	V-04, V-05, V-35	
Benzo(a)anthracene	1.24	0.17	mg/Kg wet	1.67		74.3	40-140	2.87	30		
Benzo(a)pyrene	1.21	0.17	mg/Kg wet	1.67		72.6	40-140	3.33	30		
Benzo(b)fluoranthene	1.29	0.17	mg/Kg wet	1.67		77.4	40-140	8.54	30		
Benzo(g,h,i)perylene	1.33	0.17	mg/Kg wet	1.67		79.8	40-140	14.7	30		
Benzo(k)fluoranthene	1.30	0.17	mg/Kg wet	1.67		78.1	40-140	7.69	30		
Benzoic Acid	0.168	1.0	mg/Kg wet	1.67		10.1 *	30-130	6.35	50	L-04	‡
s(2-chloroethoxy)methane	1.20	0.34	mg/Kg wet	1.67		72.3	40-140	8.27	30		
Bis(2-chloroethyl)ether	1.16	0.34	mg/Kg wet	1.67		69.7	40-140	11.2	30		
Bis(2-chloroisopropyl)ether	1.26	0.34	mg/Kg wet	1.67		75.4	40-140	10.9	30		
Bis(2-Ethylhexyl)phthalate	1.25	0.34	mg/Kg wet	1.67		75.2	40-140	1.34	30		
4-Bromophenylphenylether	1.26	0.34	mg/Kg wet	1.67		75.7	40-140	7.37	30		
Butylbenzylphthalate	1.26	0.34	mg/Kg wet	1.67		75.8	40-140	2.86	30		
Carbazole	1.22	0.17	mg/Kg wet	1.67		73.4	40-140	1.59	30		
4-Chloroaniline	0.976	0.66	mg/Kg wet	1.67		58.5	10-140	8.81	30	V-34	†
4-Chloro-3-methylphenol	1.17	0.66	mg/Kg wet	1.67		70.1	30-130	5.01	30		
2-Chloronaphthalene	1.07	0.34	mg/Kg wet	1.67		64.0	40-140	7.79	30		
2-Chlorophenol	1.23	0.34	mg/Kg wet	1.67		73.6	30-130	10.3	30		
4-Chlorophenylphenylether	1.16	0.34	mg/Kg wet	1.67		69.5	40-140	0.0576	30		
Chrysene	1.21	0.17	mg/Kg wet	1.67		72.7	40-140	2.08	30		
Dibenz(a,h)anthracene	1.24	0.17	mg/Kg wet	1.67		74.6	40-140	8.55	30		
Dibenzofuran	1.21	0.34	mg/Kg wet	1.67		72.3	40-140	0.777	30		
Di-n-butylphthalate	1.26	0.34	mg/Kg wet	1.67		75.8	40-140	2.13	30		
1,2-Dichlorobenzene	1.14	0.34	mg/Kg wet	1.67		68.3	40-140	11.1	30		
1,3-Dichlorobenzene	1.10	0.34	mg/Kg wet	1.67		66.0	40-140	10.4	30		
1,4-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.67		66.5	40-140	10.8	30		
3,3-Dichlorobenzidine	1.07	0.17	mg/Kg wet	1.67		64.1	20-140	12.1	50		† ‡
2,4-Dichlorophenol	1.17	0.34	mg/Kg wet	1.67		70.3	30-130	3.92	30		
Diethylphthalate	1.15	0.34	mg/Kg wet	1.67		68.8	40-140	1.36	30		
2,4-Dimethylphenol	1.07	0.34	mg/Kg wet	1.67		63.9	30-130	4.94	30		
Dimethylphthalate	1.19	0.34	mg/Kg wet	1.67		71.4	40-140	2.47	30		
4,6-Dinitro-2-methylphenol	1.09	0,34	mg/Kg wet	1.67		65.5	30-130	0.0916	30		
2,4-Dinitrophenol	0.557	0.66	mg/Kg wet	1.67		33.4	30-130	7.71	30		
2,4-Dinitrotoluene	1.25	0.34	mg/Kg wet	1.67		74.8	40-140	4.34	30		
2,6-Dinitrotoluene	1.33	0.34	mg/Kg wet	1.67		79.9	40-140	0.653	30		
)i-n-octylphthalate	1.54	0.34	mg/Kg wet	1.67		92.4	40-140	17.6	30		
,,2-Diphenylhydrazine/Azobenzene	1.35	0.34	mg/Kg wet	1.67		80.8	40-140	8.63	30		
Fluoranthene	1.27	0.17	mg/Kg wet	1.67		76.4	40-140	1.85	30		
Fluorene	1.17	0.17	mg/Kg wet	1.67		70.4	40-140	1.91	30		



#### QUALITY CONTROL

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch B246869 - SW-846 3546											
LCS Dup (B246869-BSD1)			]	Prepared: 11	/24/19 Analy	yzed: 11/27/1	9				
Hexachlorobenzene	1.31	0.34	mg/Kg wet	1.67		78.9	40-140	4.86	30		
Hexachlorobutadiene	1.13	0.34	mg/Kg wet	1.67		67.6	40-140	12.9	30		
Hexachlorocyclopentadiene	0.678	0.34	mg/Kg wet	1.67		40.7	40-140	1.99	30	V-05	
Hexachloroethane	1.11	0.34	mg/Kg wet	1.67		66.4	40-140	8.96	30		
Indeno(1,2,3-cd)pyrene	1.37	0.17	mg/Kg wet	1.67		82.0	40-140	9.48	30		
sophorone	1.24	0.34	mg/Kg wet	1.67		74.7	40-140	6.67	30		
I-Methylnaphthalene	1.05	0.17	mg/Kg wet	1.67		63.0	40-140	4.05	30		
2-Methylnaphthalene	1.27	0.17	mg/Kg wet	1.67		76.0	40-140	4.69	30		
2-Methylphenol	1.17	0.34	mg/Kg wet	1.67		70.1	30-130	7.79	30		
3/4-Methylphenol	1,21	0.34	mg/Kg wet	1.67		72.4	30-130	4.66	30		
Naphthalene	1.19	0.17	mg/Kg wet	1.67		71.4	40-140	8.92	30		
-Nitroaniline	1.28	0.34	mg/Kg wet	1.67		76.7	40-140	1.50	30		
-Nitroaniline	1.20	0.34	mg/Kg wet	1.67		72.3	30-140	0.607	30		
-Nitroaniline	1.23	0.34	mg/Kg wet	1.67		74.1	40-140	7.19	30		
Vitrobenzene	1.24	0.34	mg/Kg wet	1.67		74.1	40-140	9.29	30		
2-Nitrophenol	1.39	0.34	mg/Kg wet	1.67		83.7	30-130	9.75	30		
-Nitrophenol	1.26	0.66	mg/Kg wet	1.67		75.8	30-130	9.53	50		
N-Nitrosodimethylamine	1.04	0.34	mg/Kg wet	1.67		62.4	40-140	9.71	30		
N-Nitrosodiphenylamine/Diphenylamine	1.36	0.34	mg/Kg wet	1.67		81.4	40-140	6.58	30		
N-Nitrosodi-n-propylamine	1.21	0.34	mg/Kg wet	1.67		72.5	40-140	8.15	30		
ntachloronitrobenzene	1.30	0.34	mg/Kg wet	1.67		78.1	40-140	1.16	30		
entachlorophenol	0.770	0.34	mg/Kg wet	1.67		46.2	30-130	2.65	30	V-05	
Phenanthrene	1.27	0.17	mg/Kg wet	1.67		76.2	40-140	2.39	30		
Phenol	1.32	0.34	mg/Kg wet	1.67		79.1	30-130	7.99	30		
Pyrene	1.25	0.17	mg/Kg wet	1.67		75.2	40-140	3.41	30		
Pyridine	0.687	0.34	mg/Kg wet	1.67		41.2	30-140	8.34	30		
,2,4,5-Tetrachlorobenzene	1.20	0.34	mg/Kg wet	1.67		72.2	40-140	14.3	30		
,2,4-Trichlorobenzene	1.16	0.34	mg/Kg wet	1.67		69.6	40-140	11.8	30		
2,4,5-Trichlorophenol	1.29	0.34	mg/Kg wet	1.67		77.3	30-130	2.12	30		
2,4,6-Trichlorophenol	1.24	0.34	mg/Kg wet	1.67		74.2	30-130	5.43	30		
Surrogate: 2-Fluorophenol	5.38		mg/Kg wet	6.67		80.7	30-130				
Surrogate: Phenol-d6	5.28		mg/Kg wet	6.67		79.3	30-130				
Surrogate: Nitrobenzene-d5	2.52		mg/Kg wet	3.33		75.7	30-130				
Surrogate: 2-Fluorobiphenyl	2.68		mg/Kg wet	3.33		80.6	30-130				
Surrogate: 2,4,6-Tribromophenol	5.69		mg/Kg wet	6.67		85.4	30-130				
Surrogate: p-Terphenyl-d14	2.84		mg/Kg wet	3.33		85.1	30-130				



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 QUALITY CONTROL

#### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B247114 - SW-846 7471										
Blank (B247114-BLK1)				Prepared: 1	1/26/19 Analy	zed: 11/27/	19			
Mercury	ND	0.025	mg/Kg wet			· · · · · · · · · · · · · · · · · · ·				
LCS (B247114-BS1)				Prepared: 1	1/26/19 Analy	zed: 11/27/	19			
Mercury	2.73	0.38	mg/Kg wet	2.93		93.1	71.3-128.7			
LCS Dup (B247114-BSD1)				Prepared: 1	1/26/19 Analy	/zcd: 11/27/	19			
Мегсигу	2.23	0.38	mg/Kg wet	2.93		76.0	71.3-128.7	20.2	20	R-05
Batch B247118 - SW-846 3050B										
				Prepared: 1:	1/26/19 Analy	zed: 11/27/	19			
Blank (B247118-BLK1) Antimony	ND	1.7	mg/Kg wet	ricpared; I	ZUIT Analy	zcu. 11/2//				
Arsenic	ND ND	1.7	mg/Kg wet							
Barium	ND ND	1.7	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND ND	0.17	mg/Kg wet							
Chromium	ND ND	0.33	mg/Kg wet							
.ead	ND ND	0.50	mg/Kg wet							
lickel	ND ND	0.33	mg/Kg wet							
elenium		3.3	mg/Kg wet							
elenium ilver	ND	0.33	mg/Kg wet							
lallium	ND	1.7	mg/Kg wet							
	ND	0.67	mg/Kg wet							
'anadium inc	ND	0.67	mg/Kg wet							
linc	ND	0.07	mg/ng wet							
.CS (B247118-BS1)				·····	1/26/19 Analy					
antimony	29.7	5.0	mg/Kg wet	40.0		74.2	6.3-208			
rsenic	108	5.0	mg/Kg wet	125		86.5	82.4-116.8			
arium	539	5.0	mg/Kg wet	529		102	81.7-118.5			
eryllium	147	0.50	mg/Kg wet	155		94.8	82.6-116.8			
admium	37.6	0.50	mg/Kg wet	37.7		99.7	82.2-117.5			
hromium	51.4	0.99	mg/Kg wet	58.3		88.1	82-118.2			
ead	94.9	1.5	mg/Kg wet	111		85.5	82.3-117.1			
fickel	311	0.99	mg/Kg wet	333		93.5	82.6-117.4			
elenium	226	9.9	mg/Kg wet	251		89.9	78.9-121.5			
ilver	26.5	0.99	mg/Kg wet	27.2		97.6	81-119.2			
hallium	221	5.0	mg/Kg wet	241		91.5	80.5-119.1			
anadium (anadium	108	2.0	mg/Kg wet	125		86.7	78.6-120.8			
ine	325	2.0	mg/Kg wet	351		92.5	80.3-119.4			
CS Dup (B247118-BSD1)				Prepared: 1	1/26/19 Analy	zed: 11/27/	19			
ntimony	29.6	4.9	mg/Kg wet	40.0		73.9	6.3-208	0.448	30	
rsenic	109	4.9	mg/Kg wet	125		86.8	82.4-116.8	0.361	30	
arium	583	4.9	mg/Kg wet	529		110	81.7-118.5	7.84	20	
eryllium	145	0.49	mg/Kg wet	155		93.4	82.6-116.8	1.50	30	
admium	35.9	0.49	mg/Kg wet	37.7		95.2	82.2-117.5	4.66	20	
hromium	51.9	0.98	mg/Kg wet	58.3		89.0	82-118.2	0.978	30	
ead	96.4	1.5	mg/Kg wet	111		86.9	82.3-117.1	1.59	30	
ickel	316	0.98	mg/Kg wet	333		94.9	82.6-117.4	1.52	30	
elenium	225	9.8	mg/Kg wet	251		89.6	78.9-121.5	0.276	30	
lver	27.1	0.98	mg/Kg wet	27.2		99.7	81-119.2	2.19	30	
hallium	220	4.9	mg/Kg wet	241		91.2	80.5-119.1	0.306	30	
anadium	109	2.0	mg/Kg wet	125		87.0	78.6-120.8	0.292	30	
inc	321	2.0	mg/Kg wet	351		91.5	80.3-119.4	1.12	30	

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#### QUALITY CONTROL

#### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Kesun	Limit	Onns	Devel	Result	70102.0	Lillins	NG D	Limit	140103
Batch B247118 - SW-846 3050B										
Duplicate (B247118-DUP1)	Sour	ce: 19K1404	-01	Prepared: 11	/26/19 Analyz	ed: 11/27/	19			
Antimony	ND	3.0	mg/Kg dry		ND			NC	35	
Arsenic	5.95	3.0	mg/Kg dry		8.14			31.0	35	
Barium	63.2	3.0	mg/Kg dry		63.7			0.781	35	
Beryllium	0.483	0.30	mg/Kg dry		0.493			2.13	35	
Cadmium	0.314	0.30	mg/Kg dry		ND			NC	35	
Chromium	14.5	0.60	mg/Kg dry		13.8			4.91	35	
cad	90.7	0.90	mg/Kg dry		86.6			4.71	35	
Nickel	10.5	0.60	mg/Kg dry		9.84			6.58	35	
elenium	ND	6.0	mg/Kg dry		ND			NC	35	
lilver	ND	0.60	mg/Kg dry		ND			NC	35	
`hallium	ND	3.0	mg/Kg dry		ND			NC	35	
/anadium	34.6	1.2	mg/Kg dry		37.0			6.79	35	
Zinc	68.6	1.2	mg/Kg dry		69.7			1.48	35	
MRL Check (B247118-MRL1)				Prepared: 11	/26/19 Analyz	ed: 11/27/	19			
ead	0.520	0.50	mg/Kg wet	0.500		104	80-120			
Matrix Spike (B247118-MS1)	Sour	ce: 19K1404	-01	Prepared: 11	/26/19 Analyz	ed: 11/27/	19			
Antimony	10.6	2.9	mg/Kg dry	28.9	1.61	31.1 *	75-125			MS-07
Arsenic	30.8	2.9	mg/Kg dry	28.9	8.14	78.3	75-125			
ırium	94.7	2.9	mg/Kg dry	28.9	63.7	108	75-125			
seryllium	27.3	0.29	mg/Kg dry	28.9	0.493	92.8	75-125			
Cadmium	25.9	0.29	mg/Kg dry	28.9	0.295	88.7	75-125			
Chromium	42.0	0.58	mg/Kg dry	28.9	13.8	97.8	75-125			
.ead	117	0.87	mg/Kg dry	28.9	86.6	107	75-125			
lickel	36.7	0.58	mg/Kg dry	28.9	9.84	93.1	75-125			
elenium	25.1	5.8	mg/Kg dry	28.9	ND	86.9	75-125			
filver	29.2	0.58	mg/Kg dry	28.9	ND	101	75-125			
hallium	31.3	2.9	mg/Kg dry	28.9	ND	108	75-125			
/anadium	62.9	1.2	mg/Kg dry	28.9	37.0	89.6	75-125			
inc	126	1.2	mg/Kg dry	57.8	69.7	97.4	75-125			



#### FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits.  Reported value for this compound is likely to be biased on the low side.
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side.  Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-35	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.



#### CERTIFICATIONS

rtified Analyses included in this Report

Analyses included in this Report	Certifications	
Analyte	Cei illicativiti)	
SW-846 6010D in Soil		
Antimony	CT,NH,NY,ME,VA,NC	
Arsenic	CT,NH,NY,ME,VA,NC	
Barium	CT,NH,NY,ME,VA,NC	
Beryllium	CT,NH,NY,ME,VA,NC	
Cadmium	CT,NH,NY,ME,VA,NC	
Chromium	CT,NH,NY,ME,VA,NC	
Lead	CT,NH,NY,AIHA,ME,VA,NC	
Nickel	CT,NH,NY,ME,VA,NC	
Selenium	CT,NH,NY,ME,VA,NC	
Silver	CT,NH,NY,ME,VA,NC	
Thallium	CT,NH,NY,ME,VA,NC	
Vanadium	CT,NH,NY,ME,VA,NC	
Zinc	CT,NH,NY,ME,VA,NC	
SW-846 7471B in Soil		
Mercury	CT,NH,NY,NC,ME,VA	
SW-846 8270D-E in Soil		
Acenaphthene	CT,NY,NH,ME,NC,VA	
Acenaphthylene	CT,NY,NH,ME,NC,VA	
Acetophenone	NY,NH,ME,NC,VA	
Aniline	NY,NH,ME,NC,VA	
Anthracene	CT,NY,NH,ME,NC,VA	
Benzidine	CT,NY,NH,ME,NC,VA	
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA	
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA	
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA	
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA	
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA	
Benzoic Acid	NY,NH,ME,NC,VA	
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA	
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA	
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA	
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA	
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA	
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA	
Carbazole	NC	
4-Chloroaniline	CT,NY,NH,ME,NC,VA	
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA	
2-Chloronaphthalene	CT,NY,NH,NC,VA	
2-Chlorophenol	CT,NY,NH,ME,NC,VA	
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA	
Chrysene	CT,NY,NH,ME,NC,VA	
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA	
Dibenzofuran	CT,NY,NH,ME,NC,VA	
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA	
1,2-Dichlorobenzene	NY,NH,ME,NC,VA	
1,3-Dichlorobenzene	NY,NH,ME,NC,VA	



#### CERTIFICATIONS

ertified Analyses included in this Report

Analyte	Certifications
SW-846 8270D-E in Soil	
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluenc	CT,NY,NH,ME,NC,VA
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
1,2-Diphenylhydrazine/Azobenzene	NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
I-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodimethylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachloronitrobenzene	NY,NC
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Phenoi	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
Pyridine	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC



The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publile Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2019
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
МЕ	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2019
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

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•	Page / of /	<sup>2</sup> Preservation Code	Courier Use Only	Total Number Of:	**************************************	GLASS	PLASTIC	BACTERIA	ENCORE		Glassware in the fridge?		Glassware in freezer? Y / N	Prepackaged Cooler? Y / N	Contest is not responsible for missing samples from prepacked	coolers	Matrix Codes:	WW = Waste Water	A Air	SL = Studge	O = Other (please		? Preservation Codes:	H = HCL M = Methanol	N = Nitric Acid	B = Sodium Bisulfate X = Sodium Hydroxide	T = Sodium	O = Other (please define)	PCB ONLY	Soxhiet Non Soxhlet		n the Chain of Custody. The nd is used to determine wha	oratory's responsibility. Cor	
:62019	ANALYSIS REQUESTED																								Please use the following codes to indicate	possible sample concentration within the Conc Code column above:	H - High; M - Medium; L - Low; C - Clean; U -		Other	Chromatogram  AlHA-LAP,LLC		Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine wha applicable the laboration will	Test values your partnership on each project and will try to assist with missing information, but will not the laboratory's responsibility. Cor Test values your partnership on each project and will try to assist with missing information, but will not the laboratory of the laboratory of the laboratory of the laboratory.	
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39 Spruce Street	Dissolved Metals Samples	Fleid Filtered	Cab to Fitter Officiologophere Samples	Field Filtered	Lab to Filter		EXCEL	28.17	May, ST	15.60%	CTERÍA													Special Requirements	MCP Certificat		RCP Certificati	MA Sta		MWRA School	MBTA	Disclaimer: Con- Chain of Custody	Test values your pa	
estlabs.com	COSTODI NEC	0 0				Data Delivery	X		ASUNDQUIST & CONCONSILATIONS LEW	COWCONSULTANTS, COM	CONTRACTOR CLASS	2												Special R										
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ntto:	Requested Tr	PFAS 10-Day (std)	Rush.A	1-bay	2-Day	Formati	Other:	CLP Like Data Pkg Required:	Email To: ASU	Fax To #: MO	Delegation (Contraction of Contraction of Contracti	1400	1500	_		1020	1130	1230	1300	1320	1430 C	mments:		ction Limit Requirements						Government Federal	City			
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I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples\_\_\_\_\_



Doc# 277 Rev 5 2017

Login	Sample Re	ceipt Checklist -	(Rejection (	riteria Lisi	ing - U		ce Policy) A		
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Meoh-		250 mL Amb.		250 mL				mb/Clear	ļ
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Thiosulfate-		SOC Kit Perchlorate		Ziple		***************************************			
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Meoh- Bisulfate-		Col./Bacteria		Flash				nb/Clear	
DI-		Other Plastic		Other				соге	
Thiosulfate-		SOC Kit		Plastic			Frozen:		
Sulfuric-		Perchlorate		Ziple					
Comments:									





# **CDW Consultants, Inc.**

MicroVision Labs Coal Ash Report, Job Number: 13409 CDW Consultants, Inc. Project Number: 1830 CDW Consultants, Inc. Project Name: Beaver St

#### Scope of Work:

This report covers the methods and findings of the Coal/Coal Ash analysis that MicroVision Laboratories, Inc. conducted on Three (3) soil samples submitted for testing from the Beaver St project, number 1830. The purpose of this analysis was to detect and document any coal, coal ash, wood ash or asphalt that may be present in the submitted soil samples by use of a combination of microscopy techniques including SEM/EDS, PLM, and macroscopic inspection.

#### Methods:

MicroVision Labs is accredited to the ISO/IEC 17025:2017 standard. This analysis follows our in house SOP #MVL05 (Microscopic Analysis for Coal, Coal Ash and Wood Ash). This method is listed on our certificate of accreditation and has been validated.

### Findings:

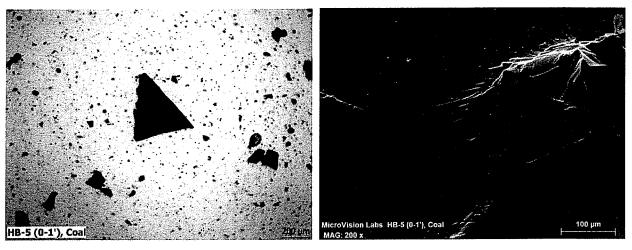
The following pages display the data for each particle type detected in the samples for this project. Each page contains a PLM image, SEM image, and EDS spectrum for the particle types detected for these samples as well as particle type descriptions and observations.

Page 2 12/31/2019

## Sample: HB-5 (0-1')

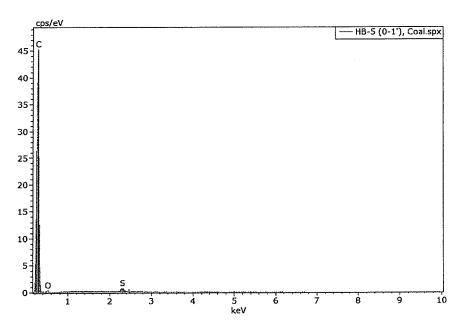
### **Number of Suspect Particle Types: Three (3)**

**Coal:** This particle type consisted of eleven (11) shiny, black grains approximately 1-3mm in diameter. The PLM examination indicated this particle type to be consistent with coal. The PLM and SEM images of this particle type show the angular edges and typical conchoidal fractures found in coal.



PLM Image SEM Image

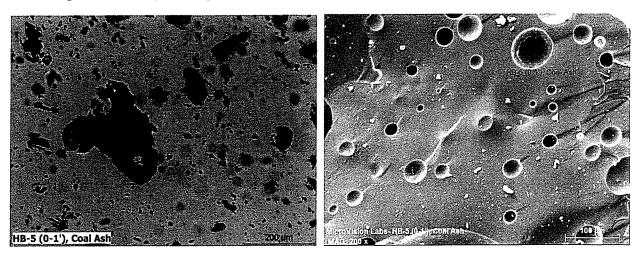
The EDS spectrum, shown below, confirms that this particle type is coal. The analysis for this particle shows concentrations of carbon, oxygen and sulfur.



#### ISO/IEC 17025:2017 Accredited

Page 3 12/31/2019

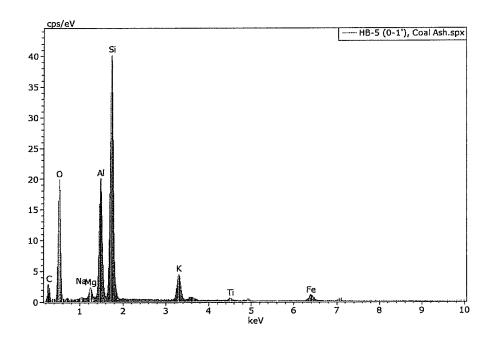
**Coal Ash:** This particle type consisted of four (4) dark, porous grains approximately 1-3mm in diameter. The PLM examination indicated this particle type to be consistent with coal ash. The PLM and SEM images show the spherical gas voids that formed during combustion.



**PLM Image** 

**SEM Image** 

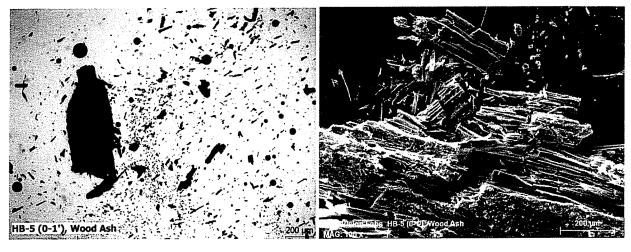
The EDS spectrum, shown below, indicates this particle type is coal ash. The analysis for this particle shows concentrations of carbon, oxygen, sodium, magnesium, aluminum, silicon, potassium, titanium and iron.



#### ISO/IEC 17025:2017 Accredited

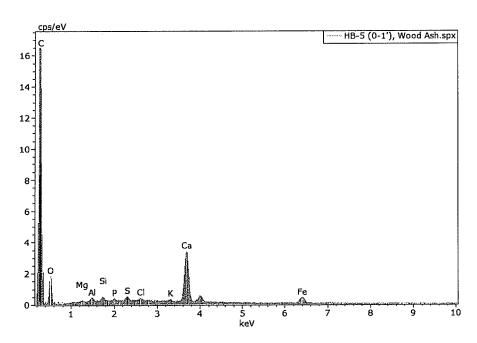
Page 4 12/31/2019

**Wood Ash:** This particle type consisted of two (2) friable, black grains approximately 2mm in length. The PLM examination indicated this particle type to be consistent with wood ash. The PLM and SEM photos show the cellular structure typical of wood still present in these grains.



PLM Image SEM Image

The EDS spectrum, shown below, indicates this particle type is wood ash. The analysis for this particle shows concentrations of carbon, oxygen, magnesium, aluminum, silicon, phosphorus, sulfur, chlorine, potassium, calcium and iron.



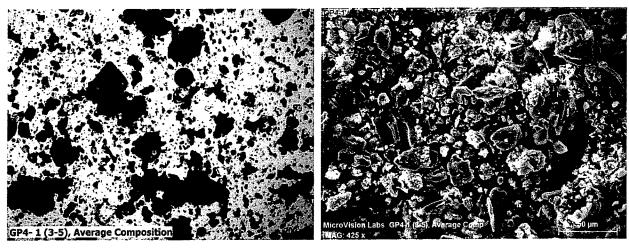
#### ISO/IEC 17025:2017 Accredited

Page 5 12/31/2019

# Sample: GP4-1 (3-5)

### No coal, coal ash, wood ash, or asphalt particles were detected in this sample.

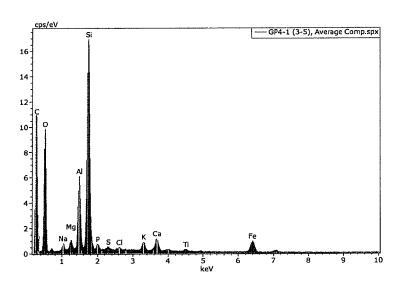
**Minerals:** This particle type consisted of over one hundred (100+) shiny, dark grains 1-10mm in diameter. The PLM examination indicated this particle type to be consistent with mineral matter. The PLM and SEM images of this particle type are shown below.



**PLM Image** 

**SEM Image** 

The EDS spectrum results, shown below, indicate this particle type is minerals. The analysis for this particle shows concentrations of carbon, oxygen, sodium, magnesium, aluminum, silicon, phosphorus, sulfur, chlorine, potassium, calcium, titanium and iron.



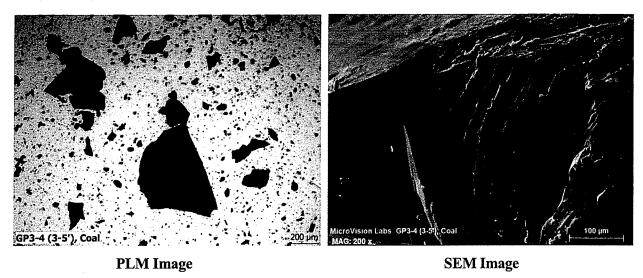
#### ISO/IEC 17025:2017 Accredited

Page 6 12/31/2019

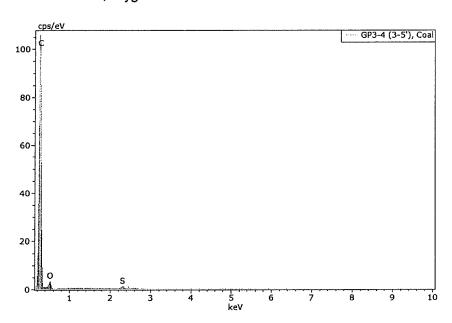
# Sample: GP3-4 (3-5')

#### Number of Suspect Particle Types: Two (2)

**Coal:** This particle type consisted of six (6) shiny, black grains approximately 1-3mm in diameter. The PLM examination indicated this particle type to be consistent with coal. The PLM and SEM images of this particle type show the angular edges and typical conchoidal fractures found in coal.



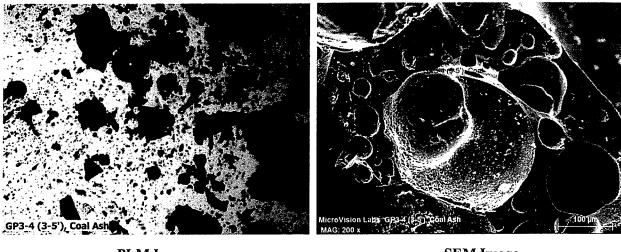
The EDS spectrum, shown below, confirms that this particle type is coal. The analysis for this particle shows concentrations of carbon, oxygen and sulfur.



#### ISO/IEC 17025:2017 Accredited

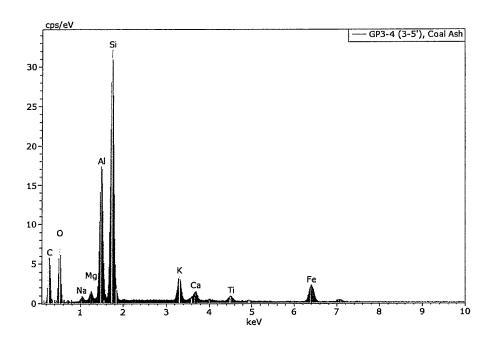
Page 7 12/31/2019

**Coal Ash:** This particle type consisted of two (2) dark, porous grains approximately 2-4mm in diameter. The PLM examination indicated this particle type to be consistent with coal ash. The PLM and SEM images show the spherical gas voids that formed during combustion.



PLM Image SEM Image

The EDS spectrum, shown below, indicates this particle type is coal ash. The analysis for this particle shows concentrations of carbon, oxygen, sodium, magnesium, aluminum, silicon, potassium, calcium, titanium and iron.



#### ISO/IEC 17025:2017 Accredited

### **Results Summary Table:**

Sample Name	Material Detected
HB-5 (0-1')	Coal (light), Coal Ash (trace), Wood Ash (trace)
GP4-1 (3-5)	Minerals (heavy)
GP3-4 (3-5')	Coal (light), Coal Ash (trace)

The concentrations of the particle types detected in these samples are listed in parenthesis in the table above and are based on the number of particles found and the relative difficulty in finding them. The concentration information is listed for informational purposes only and has no bearing on exemption status.

Please let us know if you have any questions about this analysis or if there is anything else we can do for you.

Sincerely,

Alexander Cloonan Analytical Microscopist

Reviewed by: AAC

Project informs  Res  FIIR  Polished Cross Section  Found Time and	Project information    SEAVA 577   Polished Cross Section	MicroVision Laboratories, inc. 187 Billenica Road, Chelmsford, MA 01824 Phone 978-250-9909 Fax 978-250-9901 Toll Free 1-877-250-9909 microvisionlabs.com	YES / NO	Hazardous Contaffinants: YES / NO If Yes, phease list:	A CONTRACTOR OF THE PARTY OF TH	Relinquished By: Date/Time Received By: Date/Time Tum /	12)	11)	10)	9)	8)	7)	6)	5)	4)	3) 607-4(3-5) 12/1-/1-1 Ams X	AMS	1) HB- 5 (0-1') "114111 M-> X	Collecte Date  Sampler Initials  Coal Ash Test  Lead Paint  SEM/EDS  PLM/Light Microscopy  Soot ID  Dust ID  Unknow Mat'i ID		Email: AS + nd sy, 5, e con Consultion 75, con		Phone: 508-50 4-2647	Patick, ma		Client CDw Consular 15 July	Client information	Chain Of Custody MicroVision La
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December 3, 2019

Alan Sundquist CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

Project Location: Beaver St., Waltham, MA

Client Job Number: Project Number: 1830

Laboratory Work Order Number: 19K1403

Michelle Kach

Enclosed are results of analyses for samples received by the laboratory on November 22, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Koch Project Manager

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CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 ATTN: Alan Sundquist

PURCHASE ORDER NUMBER:

REPORT DATE: 12/3/2019

PROJECT NUMBER:

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER:

1830

19K1403

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Beaver St., Waltham, MA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HB-1	19K1403-01	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-5	19K1403-02	Soil		SM 2540G	
				SW-846 6010D	
•				SW-846 7471B	
				SW-846 8270D-E	
HB-6	19K1403-03	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-7	19K1403-04	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-8	19K1403-05	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
НВ-9	19K1403-06	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-10	19K1403-07	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-11	19K1403-08	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-14	19K1403-09	Soil		SM 2540G	
112 11	17111 100 03			SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
HB-15	19K1403-10	Soil		SM 2540G	
יו-טוג	17101705-10	Jon		SW-846 6010D	
				SW-846 7471B	
				SW-846 8270D-E	
				2 2 2 2	



#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.



#### SW-846 6010D

#### ualifications

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Arsenic

B247130-BSD1

Vanadium

B247130-BSD1

#### SW-846 8270D-E

#### Qualifications:

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

19K1403-01[HB-1], 19K1403-02[HB-5], 19K1403-03[HB-6], 19K1403-04[HB-7], 19K1403-05[HB-8], 19K1403-06[HB-9], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-06[HB-9], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-06[HB-11], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-07[HB-10], 9K1403-09[HB-14], 19K1403-10[HB-15], B246869-BLK1, B246869-BS1, B246869-BSD1

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated. Analyte & Samples(s) Qualified:

Benzidine

19K1403-02[HB-5], B246869-MS1, B246869-MSD1

Benzoic Acid

19K1403-02[HB-5], B246869-MS1, B246869-MSD1

Pyridine

9K1403-02[HB-5], B246869-MS1, B246869-MSD1

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

#### Analyte & Samples(s) Qualified:

Benzidine

19K1403-01[HB-1], 19K1403-02[HB-5], 19K1403-03[HB-6], 19K1403-04[HB-7], 19K1403-05[HB-8], 19K1403-06[HB-9], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-09[HB-14], 19K1403-10[HB-15], B246869-BLK1, B246869-BS1, B246869-BSD1, B246869-MS1, B246869-MSD1, S043199-CCV1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

#### Analyte & Samples(s) Qualified:

Benzidine

19K1403-01[HB-1], 19K1403-02[HB-5], 19K1403-03[HB-6], 19K1403-04[HB-7], 19K1403-05[HB-8], 19K1403-06[HB-9], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-09[HB-14], 19K1403-10[HB-15], B246869-BLK1, B246869-BS1, B246869-BSD1, B246869-MS1, B246869-MSD1, S043199-CCV1

19K1403-01[HB-1], 19K1403-02[HB-5], 19K1403-03[HB-6], 19K1403-04[HB-7], 19K1403-05[HB-8], 19K1403-06[HB-9], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-09[HB-14], 19K1403-10[HB-15], B246869-BLK1, B246869-BS1, B246869-BSD1, B246869-MSD1, S043199-CCV1

Pentachlorophenol

19K1403-01[HB-1], 19K1403-02[HB-5], 19K1403-03[HB-6], 19K1403-04[HB-7], 19K1403-05[HB-8], 19K1403-06[HB-9], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-09[HB-14], 19K1403-10[HB-15], B246869-BLK1, B246869-BS1, B246869-BSD1, B246869-MSD1, B246869-MSD1, S043199-CCV1

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

#### Analyte & Samples(s) Qualified:

19K1403-01[HB-1], 19K1403-02[HB-5], 19K1403-03[HB-6], 19K1403-04[HB-7], 19K1403-05[HB-8], 19K1403-06[HB-9], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-09[HB-14], 19K1403-10[HB-15], B246869-BLK1, B246869-BS1, B246869-BSD1, B246869-MS1, B246869-MSD1, S043199-CCV1

V-35

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is

## estimated. alyte & Samples(s) Qualified:

19K1403-01[HB-1], 19K1403-02[HB-5], 19K1403-03[HB-6], 19K1403-04[HB-7], 19K1403-05[HB-8], 19K1403-06[HB-9], 19K1403-07[HB-10], 19K1403-08[HB-11], 19K1403-09fHB-14], 19K1403-10fHB-15], B246869-BLK1, B246869-BS1, B246869-BSD1, B246869-MS1, B246869-MSD1, S043199-CCV1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington Technical Representative

na Watslengton



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019

Field Sample #: HB-1

Sampled: 11/19/2019 10:00

Sample ID: 19K1403-01 Sample Matrix: Soil

		S	Semivolatile Organic C	ompounds b	y GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Acenaphthylene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Acetophenone	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Aniline	ND	0.51	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Anthracene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Benzidine	ND	1.0	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Benzo(a)anthracene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Benzo(a)pyrene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Benzo(b)fluoranthene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Benzo(g,h,i)perylene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Benzo(k)fluoranthene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Benzoic Acid	ND	1.5	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Bis(2-chloroethoxy)methane	ND	0.51	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Bis(2-chloroethyl)ether	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Bis(2-chloroisopropyl)ether	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
4-Bromophenylphenylether	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
lutylbenzylphthalate	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Carbazole	ND	0.26	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
4-Chloroaniline	ND	1.0	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
4-Chloro-3-methylphenol	ND	1.0	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2-Chloronaphthalene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2-Chlorophenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
4-Chlorophenylphenylether	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Chrysene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Dibenz(a,h)anthracene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Dibenzofuran	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Di-n-butylphthalate	ND	0.51	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
1,2-Dichlorobenzene	ND	0.51	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
1,3-Dichlorobenzene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
1,4-Dichlorobenzene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
3,3-Dichlorobenzidine	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2,4-Dichlorophenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Diethylphthalate	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2,4-Dimethylphenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Dimethylphthalate	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
4,6-Dinitro-2-methylphenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2,4-Dinitrophenol	ND	1.0	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2,4-Dinitrotoluene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2,6-Dinitrotoluene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Di-n-octylphthalate	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
,2-Diphenylhydrazine/Azobenzene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Fluoranthene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Fluorene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

ate Received: 11/22/2019

Field Sample #: HB-1

Sampled: 11/19/2019 10:00

Sample ID: 19K1403-01
Sample Matrix: Soil

p-Terphenyl-d14

Sample Matrix: Soil		Semi	volatile Organic Co	ompounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Hexachlorobutadiene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Hexachlorocyclopentadiene	ND	0.51	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Hexachloroethane	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Indeno(1,2,3-cd)pyrene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Isophorone	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
I-Methylnaphthalene	ND	0.26	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2-Methylnaphthalene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2-Methylphenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
3/4-Methylphenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Naphthalene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2-Nitroaniline	ND	0.51	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
3-Nitroaniline	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
4-Nitroaniline	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Nitrobenzene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2-Nitrophenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
4-Nitrophenol	ND	1.0	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
-Nitrosodimethylamine	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
N-Nitrosodi-n-propylamine	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Pentachloronitrobenzene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Pentachlorophenol	ND	0.51	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Phenanthrene	ND	0.26	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Phenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Рутепе	ND	0.26	mg/Kg đry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Pyridine	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
1,2,4-Trichlorobenzene	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2,4,5-Trichlorophenol	ND	0.51	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
2,4,6-Trichlorophenol	ND	0.51	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:30	KLB
Surrogates		% Recovery	Recovery Limit	S	Flag/Qual				
2-Fluorophenol		75.9	30-130					11/27/19 18:30	
Phenol-d6		75.9	30-130					11/27/19 18:30	
Nitrobenzene-d5		72.6	30-130					11/27/19 18:30 11/27/19 18:30	
2-Fluorobiphenyl		71.9 79.2	30-130 30-130					11/27/19 18:30	
2,4,6-Tribromophenol		19.4	30-130					1,2,715 10.50	

30-130

78.4

11/27/19 18:30



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-1

Sampled: 11/19/2019 10:00

Sample ID: 19K1403-01
Sample Matrix: Soil

			Metals Analy	yses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Arsenic	3.2	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Barium	47	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Beryllium	0.57	0.25	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Cadmium	ND	0.25	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Chromium	11	0.50	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Lead	73	0.74	mg/Kg dry	i		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Mercury	0.15	0.036	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:38	AJL
Nickel	9.0	0.50	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Selenium	ND	5.0	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:10	TBC
Silver	ND	0.50	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:10	TBC
Thallium	ND	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc
Vanadium	34	0.99	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:42	TBC
Zinc	44	0.99	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	tbc



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-1

Sampled: 11/19/2019 10:00

Sample ID: 19K1403-01
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		66.3		% Wt	1		SM 2540G	11/25/19	11/26/19 10:34	adb



Project Location: Beaver St., Waltham, MA

Analyte

Sample Description:

Results

ND

0.42

0.21

0.42

0.42

0.42

0.42

0.42

0.82

0.42

0.42

0.42

0.42

0.21

I

1

1

1

1

1

1

1

1

1

1

1

1

mg/Kg dry

Work Order: 19K1403

Date Received: 11/22/2019 Field Sample #: HB-5

Sampled: 11/19/2019 12:00

Sample ID: 19K1403-02 Sample Matrix: Soil

Acenaphthene

Acetophenone

Aniline

Anthracene

Benzidine

Benzo(a)anthracene

Benzo(b)fluoranthene

Benzo(g,h,i)perylene

Benzo(k)fluoranthene

Bis(2-chloroethyl)ether

Bis(2-chloroethoxy)methane

Bis(2-chloroisopropyl)ether

Bis(2-Ethylhexyl)phthalate

4-Bromophenylphenylether

4-Chloro-3-methylphenol

4-Chlorophenylphenylether

Dibenz(a,h)anthracene

Di-n-butylphthalate

1,2-Dichlorobenzene

1,3-Dichlorobenzenc

1,4-Dichlorobenzene

3,3-Dichlorobenzidine

2,4-Dichlorophenol

2,4-Dimethylphenol

Dimethylphthalate

2,4-Dinitrophenol

2,4-Dinitrotoluene

2,6-Dinitrotoluene

'l-n-octylphthalate

Fluoranthene

4,6-Dinitro-2-methylphenol

1,2-Diphenylhydrazine/Azobenzene

Diethylphthalate

2-Chloronaphthalene

iutylbenzylphthalate

Carbazole

4-Chloroaniline

2-Chlorophenol

Chrysene

Dibenzofuran

Benzo(a)pyrene

Benzoic Acid

Acenaphthylene

······	Semivolatile Organic C	ompounds l	y GC/MS				
					Date	Date/Time	
RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.82	mg/Kg dry	1	MS-09, V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
1.2	mg/Kg dry	1	L-04, MS-09	SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	ì		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	ing/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.82	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.82	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB

SW-846 8270D-E

11/27/19 18:53

11/27/19 18:53

11/27/19 18:53

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11/27/19 18:53

11/27/19 18:53

11/27/19 18:53

11/27/19 18:53

KLB

11/24/19

11/24/19

11/24/19

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11/24/19

11/24/19

11/24/19

11/24/19

11/24/19

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11/24/19

11/24/19

11/24/19



- Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019

Field Sample #: HB-5

Sampled: 11/19/2019 12:00

Sample ID: 19K1403-02 Sample Matrix: Soil

		Sem	ivolatile Organic C	ompounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Fluorene	ND	0.21	mg/Kg dry	1	·	SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Hexachlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Hexachlorobutadiene	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Hexachlorocyclopentadiene	ND	0.42	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Hexachloroethane	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Indeno(1,2,3-cd)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Isophorone	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
1-Methylnaphthalene	ND	0.21	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
2-Methylnaphthalene	ND	0.21	mg/Kg dry	ŧ		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
2-Methylphenol	ND	0.42	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
3/4-Methylphenol	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Naphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
2-Nitroaniline	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
3-Nitroaniline	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
4-Nitroaniline	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Nitrobenzene	ND	0.42	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
2-Nitrophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
-Nitrophenol	ND	0.82	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
N-Nitrosodimethylamine	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
N-Nitrosodi-n-propylamine	ND	0.42	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Pentachloronitrobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Pentachlorophenol	ND	0.42	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Phenanthrene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Phenol	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Pyridine	ND	0.42	mg/Kg dry	1	MS-09	SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
1,2,4-Trichlorobenzene	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
2,4,5-Trichlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
2,4,6-Trichlorophenol	ND	0.42	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 18:53	KLB
Surrogates		% Recovery	Recovery Limit	S	Flag/Qual				
2-Fluorophenol		75.4	30-130					11/27/19 18:53	
Phenol-d6		76.7	30-130					11/27/19 18:53	
Nitrobenzene-d5		74.3	30-130					11/27/19 18:53 11/27/19 18:53	
2-Fluorobiphenyl		77.7	30-130 30-130					11/27/19 18:53	
2,4,6-Tribromophenol p-Terphenyl-d14		84.6 98.9	30-130 30-130					11/27/19 18:53	
* *									



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-5

Sampled: 11/19/2019 12:00

Sample ID: 19K1403-02
Sample Matrix: Soil

			Metals Analy	yses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	32	2.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Arsenic	11	2.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Barium	450	2.1	mg/Kg dry	ì		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Beryllium	0.28	0.21	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Cadmium	29	0.21	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Chromium	73	0.41	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Lead	2700	0.62	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Mercury	0.90	0.031	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:40	AJL
Nickel	170	0.41	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Selenium	ND	4.1	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:16	TBC
Silver	130	0.41	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:16	TBC
Thallium	ND	2.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	tbc
Vanadium	27	0.83	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:49	TBC
Zinc	5100	4.1	mg/Kg dry	5		SW-846 6010D	11/26/19	12/3/19 12:21	МЈН



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019

Field Sample #: HB-5

Sampled: 11/19/2019 12:00

Sample ID: 19K1403-02
Sample Matrix: Soil

						Date	Date/Time		
Analyte	Results	RL Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst	
% Solids	80.3	% WI	1		SM 2540G	11/25/19	11/26/19 10:35	adb	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-6

Sampled: 11/20/2019 08:30

Sample ID: 19K1403-03

Fluorene

ND

0.30

mg/Kg dry

			Semivolatile Organic C	ompounds b	y GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Acenaphthylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Acctophenone	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Aniline	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Benzidine	ND	1.2	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Benzo(a)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Benzo(a)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Benzo(b)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Benzo(g,h,i)perylene	ND	0.30	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Benzo(k)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Benzoic Acid	ND	1.8	mg/Kg dry	ŧ	L-04	SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Bis(2-chloroethoxy)methane	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Bis(2-chloroethyl)ether	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Bis(2-chloroisopropyl)ether	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
4-Bromophenylphenylether	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Butylbenzylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Carbazole	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
4-Chloroaniline	ND	1.2	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2-Chloronaphthalene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2-Chlorophenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
4-Chlorophenylphenylether	ND	0.60	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Chrysene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Dibenz(a,h)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Dibenzofuran	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Di-n-butylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
1,2-Dichlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
1,3-Dichlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
1,4-Dichlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
3,3-Dichlorobenzidine	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2,4-Dichlorophenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Diethylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2,4-Dimethylphenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Dimethylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
4,6-Dinitro-2-methylphenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2,4-Dinitrotoluene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2,6-Dinitrotoluene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Di-n-octylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
,2-Diphenylhydrazine/Azobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
			2 2 7						

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11/24/19 11/27/19 19:15 KLB

SW-846 8270D-E



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

pate Received: 11/22/2019
Field Sample #: HB-6

Sampled: 11/20/2019 08:30

Sample ID: 19K1403-03
Sample Matrix: Soil

		Sem	ivolatile Organic C	ompounds by	GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Hexachlorobutadiene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Hexachlorocyclopentadiene	ND	0.60	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Hexachloroethane	ND	0.60	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Indeno(1,2,3-cd)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Isophorone	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
1-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2-Methylphenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
3/4-Methylphenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Naphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2-Nitroaniline	ND	0.60	mg/Kg dry	ì		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
3-Nitroaniline	ND	0.60	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
4-Nitroaniline	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Nitrobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2-Nitrophenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
4-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
-Nitrosodimethylamine	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
N-Nitrosodi-n-propylamine	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Pentachloronitrobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Pentachlorophenol	ND	0.60	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Phenanthrene	ND	0.30	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Phenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Pyridine	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
1,2,4,5-Tetrachiorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
1,2,4-Trichlorobenzene	ND	0.60	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2,4,5-Trichlorophenol	ND	0.60	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
2,4,6-Trichlorophenol	ND	0.60	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:15	KLB
Surrogates		% Recovery	Recovery Limit	S	Flag/Qual				
2-Fluorophenol		76.2	30-130					11/27/19 19:15	
Phenol-d6		77.6	30-130					11/27/19 19:15	
Nitrobenzene-d5		71.5	30-130					11/27/19 19:15	
2-Fluorobiphenyl		71.6	30-130					11/27/19 19:15 11/27/19 19:15	
2,4,6-Tribromophenol p-Terphenyl-d14		77.7 80.1	30-130 30-130					11/27/19 19:15	
p-respicity:-us-		00/1	30-130					17.13	



Project Location: Beaver St., Waltham, MA

Sample Description:

tion: Work Order: 19K1403

Date Received: 11/22/2019 Field Sample #: HB-6 Sample ID: 19K1403-03

Sample Matrix: Soil

Sampled: 11/20/2019 08:30

Metals	Ana	lyses	(Total)
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Arsenic	5.3	2.9	mg/Kg dry	ī		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Barium	45	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Beryllium	0.43	0.29	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Cadmium	ND	0.29	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Chromium	14	0.58	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Lead	170	0.87	mg/Kg dry	I		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Mercury	0.21	0.043	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:42	AJL
Nickel	22	0.58	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Selenium	ND	5.8	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:23	TBC
Silver	ND	0.58	mg/Kg dry	i		SW-846 6010D	11/26/19	12/3/19 0:23	TBC
Thallium	ND	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	tbc
Vanadium	41	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:09	TBC
Zinc	63	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	tbc



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019

Field Sample #: HB-6

Sampled: 11/20/2019 08:30

Sample ID: 19K1403-03
Sample Matrix: Soil

						Date	Date/Time	
Analyte	Results RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	55.9	% Wt	1		SM 2540G	11/25/19	11/26/19 10:36	adb

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-7

Sampled: 11/20/2019 09:00

Sample ID: 19K1403-04
Sample Matrix: Soil

							Date	Data (Trime	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Acenaphthylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Acetophenone	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Aniline	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Benzidine	ND	1.2	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Benzo(a)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Benzo(a)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Benzo(b)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Benzo(g,h,i)perylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Benzo(k)fluoranthene	ND	0.32	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Benzoic Acid	ND	1.9	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Bis(2-chloroethoxy)methane	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Bis(2-chloroethyl)ether	ND	0.64	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Bis(2-chloroisopropyl)ether	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
4-Bromophenylphenylether	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
lutylbenzylphthalate	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Carbazole	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
4-Chloroaniline	ND	1.2	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2-Chloronaphthalene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2-Chlorophenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
4-Chlorophenylphenylether	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Chrysene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Dibenz(a,h)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Dibenzofuran	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Di-n-butylphthalate	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,2-Dichlorobenzene	ND	0.64	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,3-Dichlorobenzene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,4-Dichlorobenzene	ND	0.64	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,3-Dichlorobenzidine	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
.4-Dichlorophenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Diethylphthalate	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,4-Dimethylphenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Dimethylphthalate	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,6-Dinitro-2-methylphenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,4-Dinitrotoluene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
,6-Dinitrotoluene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
i-n-octylphthalate	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2-Diphenylhydrazine/Azobenzene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
luoranthene	0.39	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
luorene	ND	0.32	mg/Kg đry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019 rield Sample #: HB-7

Sampled: 11/20/2019 09:00

Sample ID: 19K1403-04 Sample Matrix: Soil

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Hexachlorobutadiene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Hexachlorocyclopentadiene	ND	0.64	mg/Kg dry	ì	V-05	SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Hexachloroethane	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Indeno(1,2,3-cd)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Isophorone	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
1-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2-Methylphenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
3/4-Methylphenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Naphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2-Nitroaniline	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
3-Nitroanitine	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
4-Nitroaniline	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Nitrobenzene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2-Nitrophenol	ND	0.64	mg/Kg dry	τ		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
4-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
N-Nitrosodimethylamine	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
.i.Nitrosodiphenylamine/Diphenylamine	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
N-Nitrosodi-n-propylamine	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Pentachloronitrobenzene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Pentachlorophenol	ND	0.64	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Phenanthrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Phenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Pyrene	0.43	0.32	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Pyridine	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
1,2,4-Trichlorobenzene	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2,4,5-Trichlorophenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
2,4,6-Trichlorophenol	ND	0.64	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 19:38	KLB
Surrogates		% Recovery	Recovery Limits	;	Flag/Qual				
2-Fluorophenol		53.6	30-130					11/27/19 19:38	
Phenol-d6		57.7	30-130					11/27/19 19:38	
Nitrobenzene-d5		51.5	30-130					11/27/19 19:38	
2-Fluorobiphenyl		56.8	30-130					11/27/19 19:38	
2,4,6-Tribromophenol		61.8	30-130					11/27/19 19:38	
p-Terphenyl-d14		68.6	30-130					11/27/19 19:38	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

ate Received: 11/22/2019

Field Sample #: HB-7

Sampled: 11/20/2019 09:00

Sample ID: 19K1403-04 Sample Matrix: Soil

Sallible Matrix, 3011			Metals Analy	/ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	tbc
Arsenic	9.1	3.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	tbc
Barium	47	3.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	tbc
Beryllium	0.47	0.31	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	tbc
Cadmium	ND	0.31	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	tbc
Chromium	15	0.62	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	tbc
Lead	180	0.93	mg/Kg dry	I		SW-846 6010D	11/26/19	11/27/19 18:47	tbc
Mercury	0.30	0.046	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:43	AJL
Nickel	22	0.62	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	tbc
Selenium	ND	6.2	mg/Kg dry	I		SW-846 6010D	11/26/19	12/3/19 0:29	TBC
Silver	ND	0.62	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:29	TBC
Thallium	ND	3.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	(bc
Vanadium	47	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:15	TBC
Zinc	64	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	tbc



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

ate Received: 11/22/2019 Field Sample #: HB-7

Sampled: 11/20/2019 09:00

Sample ID: 19K1403-04 Sample Matrix: Soil

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	53.1		% Wı	1		SM 2540G	11/25/19	11/26/19 10:36	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Pate Received: 11/22/2019 Field Sample #: HB-8

Sampled: 11/20/2019 09:30

Sample ID: 19K1403-05
Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

contemplation         Real of No.         Ost 10         Ost 10         Player of myKe 40 or 10         SW446 627001.         Clay 100 (12) (12) (12) (12) (12) (12) (12) (12)				J	•	•		_		
Acestophisprone   ND   0.36   mg/Kg dy   1	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acatione ND 0.73 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2008 KLB Amiline ND 0.75 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2008 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB Beazdeline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8270D-E 11/2419 112719 2001 KLB SW-466 8	Acenaphthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Analiane ND 0.73 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.56 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112719 1008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112479 112719 2008 KB Brastilline ND 0.57 mg/Kg dy 1 SW-466 8270D-E 112479 112479 112479 11	Acenaphthylene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Amhracene NB 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardine ND 1.4 mg/Kg dy 1 VOA, VA5, VA3 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardine ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.36 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.37 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.37 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.37 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.37 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB Beardo()apyrace ND 0.33 mg/Kg dy 1 SW.346 \$270D.E 1124/19 1127/19 20.01 KLB B	Acetophenone	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Bearealisine   ND	Aniline	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Benzo(s))Indirecence	Anthracene	ND	0.36	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Benox(ch)pyrene   ND   0.36   mg/Kg dry   1   SW-446 8270D-E   11/24/9   11/27/9 20.01   KLB	Benzidine	ND	1.4	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Bennoq(h)   Benn	Benzo(a)anthracene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Beauco(gh.i)perylene	Benzo(a)pyrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Benzok \(\text{bluoranthene}\)   ND   0.36   \(\text{right} \)	Benzo(b)fluoranthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Benzoic Acid   ND   2.1   mg/Kg dry   1   L-04   SW-446 8270D-E   11/24/19   11/27/19 20.01   KLB	Benzo(g,h,i)perylene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Bit   C-chlorosethoxy)methane	Benzo(k)fluoranthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Bis(2-chloroestylyscher   ND   0.73   mg/Kg dy   1   SW-846 8270D-E   11/24/19   11/27/19 20.0   KLB   Bis(2-chloroisopropylyscher   ND   0.73   mg/Kg dy   1   SW-846 8270D-E   11/24/19   11/27/19 20.0   KLB   Sis(2-chloroisopropylyscher   ND   0.73   mg/Kg dy   1   SW-846 8270D-E   11/24/19   11/27/19 20.0   KLB   SW-846 8270D-E   SW-846	Benzoic Acid	ND	2.1	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Bis(2-chloroestylyscher   ND   0.73   mg/Kg dy   1   SW-846 8270D-E   11/24/19   11/27/19 20.0   KLB   Bis(2-chloroisopropylyscher   ND   0.73   mg/Kg dy   1   SW-846 8270D-E   11/24/19   11/27/19 20.0   KLB   Sis(2-chloroisopropylyscher   ND   0.73   mg/Kg dy   1   SW-846 8270D-E   11/24/19   11/27/19 20.0   KLB   SW-846 8270D-E   SW-846	Bis(2-chloroethoxy)methane	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Big 2-Eithylnexyl)phthalate	Bis(2-chloroethyl)ether	ND	0.73		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
4-Bromophenylphenylether ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 3uylbenzylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4-Chloropaniline ND 1.4 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4-Chloropaniline ND 1.4 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4-Chloropaniline ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chloropaphthalane ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenylphenylether ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenylphenylether ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenylphenylether ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenylphenylether ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenylphenylether ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenylphinhalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenylphinhalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chloriphenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chloritrophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chloritrophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chloritrophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chloritrophenene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 1	Bis(2-chloroisopropyl)ether	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
SW-846 8270D-E   11/24/19   11/27/19 20:01   KLB	Bis(2-Ethylhexyl)phthalate	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
ND   0.36   mg/Kg dry   1   SW-846 8270D-E   11/24/19   11/27/19 20:01   KLB	4-Bromophenylphenylether	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
4-Chloroaniline  ND  1.4  mg/Kg dry  1  NB  1.4  mg/Kg dry  1  NB  NB  1.4  1.4  NB  1.4  1.4  NB  1.4  1.4  NB  1.4  1.4  NB  1.4  1.4  NB  1.	Butylbenzylphthalate	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
4-Chloro-3-methylphenol ND 1.4 ng/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chloronaphthalene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4-Chlorophenylphenylether ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4-Chlorophenylphenylether ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Chrysene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenza, h)anthracene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenza, h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846	L'arbazole	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2-Chloronaphthalene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Cblorophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4-Chlorophenylphenylether ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenzofuran ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenzofuran ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1,2-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1,3-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1,4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimethylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimethylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimethylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimethylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrofoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrofoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrofoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrofoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrofoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrofoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19	4-Chloroaniline	ND	1.4	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2-Chloronaphthalene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Chlorophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4-Chlorophenylphenylether ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB SW-846 8270	4-Chloro-3-methylphenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
4-Chlorophenylphenylether ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenz(a,h)anthracene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dibenzofuran ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1.3-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1.3-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1.4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dichlorobenzene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dichethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dinitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dinitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2.4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/	2-Chloronaphthalene	ND	0.73		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
4-Chlorophenylphen	2-Chlorophenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Dibenz(a,h)anthracene   ND   0.36   mg/Kg dry   1   SW-846 8270D-E   11/24/19   11/27/19 20:01   KLB	4-Chlorophenylphenylether	ND	0.73		i		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Dibenz(a,h)anthracene         ND         0.36         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           Dibenzofuran         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           Di-n-butylphthalate         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           1,2-Dichlorobenzene         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           1,3-Dichlorobenzene         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           1,4-Dichlorobenzene         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           1,4-Dichlorobenzene         ND         0.36         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           1,4-Dichlorobenzene         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB	Chrysene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Dibenzofuran         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           Di-n-butylphthalate         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           1,2-Dichlorobenzene         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           1,4-Dichlorobenzene         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           1,4-Dichlorobenzene         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           3,3-Dichlorobenzidine         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           2,4-Dichlorobenzidine         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB           Diethylphthalate         ND         0.73         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:01         KLB	Dibenz(a,h)anthracene	ND	0.36		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Di-n-butylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1,2-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1,3-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 1,4-Dichlorobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dichlorophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimitrop	Dibenzofuran	ND	0.73		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
1,2-Dichlorobenzene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         1,3-Dichlorobenzene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         1,4-Dichlorobenzene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         3,3-Dichlorobenzidine       ND       0.36       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dichlorophenol       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         Diethylphthalate       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dimethylphthalate       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         4,6-Dinitro-2-methylphenol       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dinitrotoluene       ND       0.73       mg/Kg dry       1 <t< td=""><td>Di-n-butylphthalate</td><td>ND</td><td>0.73</td><td></td><td>1</td><td></td><td>SW-846 8270D-E</td><td>11/24/19</td><td>11/27/19 20:01</td><td>KLB</td></t<>	Di-n-butylphthalate	ND	0.73		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
1,3-Dichlorobenzene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         1,4-Dichlorobenzene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         3,3-Dichlorobenzidine       ND       0.36       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dichlorophenol       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         Diethylphthalate       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dimethylphthalate       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         4,6-Dinitro-2-methylphenol       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dinitrotoluene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dinitrotoluene       ND       0.73       mg/Kg dry       1 <td< td=""><td>1,2-Dichlorobenzene</td><td>ND</td><td>0.73</td><td></td><td>1</td><td></td><td>SW-846 8270D-E</td><td>11/24/19</td><td></td><td>KLB</td></td<>	1,2-Dichlorobenzene	ND	0.73		1		SW-846 8270D-E	11/24/19		KLB
1,4-Dichlorobenzene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         3,3-Dichlorobenzidine       ND       0.36       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dichlorophenol       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         Diethylphthalate       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dimethylphthalate       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         4,6-Dinitro-2-methylphenol       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dinitrophenol       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dinitrotoluene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,6-Dinitrotoluene       ND       0.73       mg/Kg dry       1       S	1,3-Dichlorobenzene	ND	0.73		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
3,3-Dichlorobenzidine  ND 0.36 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dichlorophenol  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dicthylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitro-2-methylphenol  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrophenol  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrotoluene  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate  ND 0.73 mg/Kg dry 1  SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate	1,4-Dichlorobenzene	ND	0.73		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2,4-Dichlorophenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dicthylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimethylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4,6-Dinitro-2-methylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrophenol ND 1.4 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,6-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	3,3-Dichlorobenzidine	ND	0.36		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Diethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dimethylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4,6-Dinitro-2-methylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrophenol ND 1.4 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,6-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	2,4-Dichlorophenol	ND	0.73		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2,4-Dimethylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4,6-Dinitro-2-methylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrophenol ND 1.4 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,6-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,0-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	Diethylphthalate		0.73		1		SW-846 8270D-E	11/24/19		KLB
Dimethylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 4,6-Dinitro-2-methylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrophenol ND 1.4 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,6-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	2,4-Dimethylphenol				1		SW-846 8270D-E	11/24/19		
4,6-Dinitro-2-methylphenol ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrophenol ND 1.4 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,6-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	Dimethylphthalate				1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2,4-Dinitrophenol       ND       1.4       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,4-Dinitrotoluene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2,6-Dinitrotoluene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         Di-n-octylphthalate       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB         2-Diphenylhydrazine/Azobenzene       ND       0.73       mg/Kg dry       1       SW-846 8270D-E       11/24/19       11/27/19 20:01       KLB	4,6-Dinitro-2-methylphenol				1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2,4-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2,6-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	2,4-Dinitrophenol	ND	1,4		1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2,6-Dinitrotoluene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	2,4-Dinitrotoluene				1		SW-846 8270D-E			
Di-n-octylphthalate ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB 2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	2,6-Dinitrotoluene									
2-Diphenylhydrazine/Azobenzene ND 0.73 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB										
	Fluoranthene									
Fluorene ND 0.36 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:01 KLB	Fluorene									

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

ate Received: 11/22/2019

Field Sample #: HB-8

Sampled: 11/20/2019 09:30

Sample ID: 19K1403-05
Sample Matrix: Soil

		Semi	volatile Organic Co	ompounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Hexachlorobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Hexachlorobutadiene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Hexachlorocyclopentadiene	ND	0.73	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Hexachloroethane	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Indeno(1,2,3-cd)pyrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Isophorone	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
1-Methylnaphthalene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2-Methylnaphthalene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2-Methylphenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
3/4-Methylphenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Naphthalene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2-Nitroaniline	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
3-Nitroaniline	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
4-Nitroaniline	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Nitrobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2-Nitrophenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
4-Nitrophenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
-Nitrosodimethylamine	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.73	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
N-Nitrosodi-n-propylamine	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Pentachloronitrobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Pentachlorophenol	ND	0.73	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Phenanthrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Phenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Pyrene	0.48	0.36	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Pyridine	ND	0.73	mg/Kg dry	ŧ		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
1,2,4-Trichlorobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2,4,5-Trichlorophenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
2,4,6-Trichlorophenol	ND	0,73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:01	KLB
Surrogates		% Recovery	Recovery Limits	3	Flag/Qual				
2-Fluorophenol		68.8	30-130					11/27/19 20:01	
Phenol-d6		71.0	30-130					11/27/19 20:01	
Nitrobenzene-d5		66.6	30-130					11/27/19 20:01	
2-Fluorobiphenyl		68.4	30-130					11/27/19 20:01	
2,4,6-Tribromophenol p-Terphenyl-d14		76.9 84.1	30-130 30-130					11/27/19 20:01 11/27/19 20:01	

Work Order: 19K1403



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Date Received: 11/22/2019
Field Sample #: HB-8

Sampled: 11/20/2019 09:30

Sample ID: 19K1403-05 Sample Matrix: Soil

Metals Analyses (Total)

	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	3.6	mg/Kg dry	l		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Arsenic		5.3	3.6	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Barium		51	3.6	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Beryllium		0.54	0.36	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Cadmium		ND	0.36	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Chromium		16	0.72	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Lead		160	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Mercury		0.22	0.057	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:45	AJL
Nickel		13	0.72	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Selenium		ND	7.2	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:35	TBC
Silver		ND	0.72	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:35	TBC
Thallium		ND	3.6	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc
Vanadium		49	1.4	mg/Kg dry	I		SW-846 6010D	11/26/19	11/27/19 18:22	TBC
Zinc		78	1.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	tbc



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019

Field Sample #: HB-8

Sampled: 11/20/2019 09:30

Sample ID: 19K1403-05
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		45.7		% Wı	1		SM 2540G	11/25/19	11/26/19 10:36	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019 Field Sample #: HB-9

Sampled: 11/20/2019 10:00

Sample ID: 19K1403-06 Sample Matrix: Soil

Semivolatile (	Irganic Com	nounds by	CC/MS

Acenaphthene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Acenaphthylene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Acetophenone         ND         0.79         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Aniline         ND         0.79         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Anthracene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzol(a)anthracene         ND         0.39         mg/Kg dry         1         V-04, V-05, V-35         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzol(a)pyrene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzo(b)fluoranthene         0.43         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K	KLB KLB KLB KLB KLB KLB KLB KLB KLB KLB
Acenaphthylene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Acetophenone         ND         0.79         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Aniline         ND         0.79         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Anthracene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzo(a)anthracene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzo(a)pyrene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzo(b)fluoranthene         0.43         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K	KLB KLB KLB KLB KLB KLB KLB KLB KLB KLB
Acetophenone         ND         0.79         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Aniline         ND         0.79         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Anthracene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzidine         ND         1.5         mg/Kg dry         1         V-04, V-05, V-35         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzo(a)anthracene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzo(a)pyrene         ND         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K           Benzo(b)fluoranthene         0.43         0.39         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K	KLB KLB KLB KLB KLB KLB KLB KLB KLB KLB
Aniline ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Anthracene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzidine ND 1.5 mg/Kg dry 1 V-04, V-05, V-35 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzo(a)anthracene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzo(a)pyrene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzo(b)fluoranthene 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB KLB KLB KLB KLB KLB KLB KLB KLB
Anthracene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine ND 1.5 mg/Kg dry 1 V-04, V-05, V-35 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.43 0.49 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzoidine 0.44 0.44 0.44 0.44 0.44 0.44 0.44 0.4	KLB KLB KLB KLB KLB KLB KLB KLB
Benzidine ND 1.5 mg/Kg dry 1 V-04, V-05, V-35 SW-846 8270D-E 11/24/19 11/27/19 20:23 Kg Benzo(a)anthracene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 Kg Benzo(a)pyrene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 Kg Benzo(b)fluoranthene 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 Kg Benzo(b)fluoranthene	KLB KLB KLB KLB KLB KLB KLB
Benzo(a)anthracene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzo(a)pyrene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzo(b)fluoranthene 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB KLB KLB KLB KLB
Benzo(a)pyrene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K Benzo(b)fluoranthene 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB KLB KLB KLB
Benzo(b)fluoranthene 0.43 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB KLB
	KLB KLB KLB
Benzo(g,h,i)perylene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB KLB
e e e	KLB
Benzo(k)fluoranthene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	
Benzoic Acid ND 2.3 mg/Kg dry I L-04 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	
Bis(2-chlorocthoxy)methane ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
Bis(2-chloroethyl)ether ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
Bis(2-chloroisopropyl)ether ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
Bis(2-Ethylhexyl)phthalate ND 0.79 mg/Kg dry I SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
4-Bromophenylphenylether ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
Butylbenzylphthalate         ND         0.79         mg/Kg dry         1         SW-846 8270D-E         11/24/19         11/27/19 20:23         K	ΚLB
arbazole ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
4-Chloroaniline ND 1.5 mg/Kg dry 1 V-34 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	CLB
4-Chloro-3-methylphenol ND 1.5 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
2-Chloronaphthalene ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
2-Chlorophenol ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
4-Chlorophenylphenylether ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
Chrysene 0.41 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
Dibenz(a,h)anthracene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	KLB
	KLB
Di-n-butylphthalate ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	(LB
1,2-Dichlorobenzene ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	CLB
1,3-Dichlorobenzene ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	CLB
1,4-Dichlorobenzene ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	CLB
3,3-Dichlorobenzidine ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	CLB
7.4 Districtional	CLB
	KLB
2,4-Dimethylphenol ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	CLB
Dimethylphthalate ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	(LB
4,6-Dinitro-2-methylphenol ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	CLB
2,4-Dinitrophenol ND 1.5 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	LB
2,4-Dinitrotoluene ND 0.79 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	CLB
	LB
	LB
	LB
	LB
Fluorene ND 0.39 mg/Kg dry 1 SW-846 8270D-E 11/24/19 11/27/19 20:23 K	

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Project Location: Beaver St., Waltham, MA

Sample Description:

67.2

73.7

30-130

30-130

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-9

Sampled: 11/20/2019 10:00

Sample ID: 19K1403-06
Sample Matrix: Soil

2,4,6-Tribromophenol

p-Terphenyl-d14

		Sem	ivolatile Organic Co	mpounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Hexachlorobenzene	ND	0.79	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Hexachlorobutadiene	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Hexachlorocyclopentadiene	ND	0.79	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Hexachloroethane	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Indeno(1,2,3-cd)pyrene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Isophorone	ND	0.79	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
1-Methylnaphthalene	ND	0.39	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
2-Methylnaphthalene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
2-Methylphenol	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
3/4-Methylphenol	ND	0.79	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Naphthalene	ND	0.39	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
2-Nitroaniline	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
3-Nitroaniline	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
4-Nitroaniline	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Nitrobenzene	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
2-Nitrophenol	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
4-Nitrophenol	ND	1.5	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
-Nitrosodimethylamine	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
N-Nitrosodi-n-propylamine	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Pentachloronitrobenzene	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Pentachlorophenol	ND	0.79	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Phenanthrene	ND	0.39	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Phenol	ND	0.79	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Pyrene	0.74	0.39	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Pyridine	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
1,2,4-Trichlorobenzene	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
2,4,5-Trichlorophenol	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
2,4,6-Trichlorophenol	ND	0.79	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:23	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		63.6	30-130					11/27/19 20:23	
Phenol-d6		65.6	30-130					11/27/19 20:23	
Nitrobenzene-d5		60.8	30-130					11/27/19 20:23 11/27/19 20:23	
2-Fluorobiphenyl		61.6	30-130					11/2//17 20:23	

11/27/19 20:23

11/27/19 20:23



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

)ate Received: 11/22/2019

Field Sample #: HB-9

Sampled: 11/20/2019 10:00

Sample ID: 19K1403-06 Sample Matrix: Soil

			Metals Anal	yses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Arsenic	7.0	3.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Barium	54	3.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Beryllium	0.41	0.38	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Cadmium	ND	0.38	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Chromium	16	0.76	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Lead	200	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Mercury	0.22	0.059	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:46	AJL
Nickel	18	0.76	mg/Kg dry	ı		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Selenium	ND	7.6	mg/Kg dry	I		SW-846 6010D	11/26/19	12/3/19 0:42	TBC
Silver	ND	0.76	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:42	TBC
Thallium	ND	3.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc
Vanadium	42	1.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:28	TBC
Zinc	140	1.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:59	tbc



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019

Field Sample #: HB-9

Sampled: 11/20/2019 10:00

Sample ID: 19K1403-06
Sample Matrix: Soil

							Date	Date/Time	
	Analyte	Results RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		42.7	% Wt	1		SM 2540G	11/25/19	11/26/19 10:37	adb

Work Order: 19K1403



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

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Pate Received: 11/22/2019 Field Sample #: HB-10 Sample ID: 19K1403-07

Sample Matrix: Soil

Sampled: 11/20/2019 10:30

Semivolatile	Organic	Compounds	by	GC/MS
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			Semivolatile Organic C	ompounds b	y GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Acenaphthylene	ND	0.38	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Acetophenone	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Aniline	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Anthracene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Benzidine	ND	1.5	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Benzo(a)anthracene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Benzo(a)pyrene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Benzo(b)fluoranthene	0.39	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Benzo(g,h,i)perylene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Benzo(k)fluoranthene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Benzoic Acid	ND	2.2	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Bis(2-chloroethoxy)methane	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Bis(2-chloroethyl)ether	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Bis(2-chloroisopropyl)ether	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.75	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
4-Bromophenylphenylether	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Butylbenzylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Larbazole	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
4-Chloroaniline	ND	1.5	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
4-Chloro-3-methylphenol	ND	1.5	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2-Chloronaphthalene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2-Chlorophenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
4-Chlorophenylphenylether	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Chrysene	ND	0.38	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Dibenz(a,h)anthracene	ND	0.38	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Dibenzofuran	ND	0.75	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Di-n-butylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
1,2-Dichlorobenzene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
1,3-Dichlorobenzene	ND	0.75	mg/Kg dry	ì		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
1,4-Dichlorobenzene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
3,3-Dichlorobenzidine	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2,4-Dichlorophenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Diethylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2,4-Dimethylphenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Dimethylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
4,6-Dinitro-2-methylphenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2,4-Dinitrophenol	ND	1.5	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2,4-Dinitrotoluene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2,6-Dinitrotoluene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Di-n-octylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2-Diphenylhydrazine/Azobenzene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Fluoranthene	0.60	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Fluorene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

85.4

30-130

Work Order: 19K1403

Pate Received: 11/22/2019 Field Sample #: HB-10

Sampled: 11/20/2019 10:30

Sample ID: 19K1403-07 Sample Matrix: Soil

p-Terphenyl-d14

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Hexachlorobutadiene	ND	0.75	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Hexachlorocyclopentadicne	ND	0.75	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Hexachloroethane	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Indeno(1,2,3-cd)pyrene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Isophorone	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
1-Methylnaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2-Methylnaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2-Methylphenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
3/4-Methylphenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Naphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2-Nitroaniline	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
3-Nitroaniline	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
4-Nitroaniline	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Nitrobenzene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2-Nitrophenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
4-Nitrophenol	ND	1.5	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
I-Nitrosodimethylamine	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
N-Nitrosodi-n-propylamine	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Pentachloronitrobenzene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Pentachlorophenol	ND	0.75	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Phenanthrene	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Phenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Рутепе	0.67	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Pyridine	ND	0.75	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
1,2,4-Trichlorobenzene	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2,4,5-Trichlorophenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
2,4,6-Trichlorophenol	ND	0.75	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 20:46	KLB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
2-Fluorophenol		63.2	30-130					11/27/19 20:46	
Phenol-d6		65.7	30-130					11/27/19 20:46	
Nitrobenzene-d5		61.6	30-130					11/27/19 20:46	
2-Fluorobiphenyl		67.0 71.6	30-130 30-130					11/27/19 20:46 11/27/19 20:46	
2,4,6-Tribromophenol		/1.0	30-130		*			11/2//19 20:40	

11/27/19 20:46



Metals Analyses (Total)

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-10

Sampled: 11/20/2019 10:30

Sample ID: 19K1403-07
Sample Matrix: Soil

				, , ,					
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Antimony	ND	3.8	mg/Kg dry	l		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Arsenic	12	3.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Barium	50	3.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Beryllium	0.51	0.38	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Cadmium	0.41	0.38	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Chromium	16	0.77	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Lead	270	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Mercury	0.29	0.056	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:48	AJL
Nickel	19	0.77	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Selenium	ND	7.7	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:48	TBC
Silver	ND	0.77	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 0:48	TBC
Thallium	ND	3.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc
Vanadium	66	1.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:34	TBC
Zinc	110	1.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:04	tbc



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-10

Sampled: 11/20/2019 10:30

Sample ID: 19K1403-07 Sample Matrix: Soil

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	44.1		% Wt	1		SM 2540G	11/25/19	11/26/19 10:37	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-11

Sampled: 11/20/2019 11:00

Sample ID: 19K1403-08 Sample Matrix: Soil

			Semivolatile Organic C	ompounds b	y GC/MS				
	n .	DY	¥1-44-	Diludes.	Floor(Ossal	Method	Date Prepared	Date/Time Analyzed	Analyst
Analyte Acenaphthene	Results	RL 0.28	Units mg/Kg dry	Dilution 1	Flag/Qual	SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Acenaphthylene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Acetophenone	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Aniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Benzidine	ND	1.1	mg/Kg dry	i	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Benzo(a)anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Benzo(a)pyrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Benzo(b)fluoranthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Benzo(g,h,i)perylene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Benzo(k)fluoranthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Benzoic Acid	ND	1.6	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Bis(2-chloroethoxy)methane	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Bis(2-chloroethyl)ether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Bis(2-chloroisopropyl)ether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
4-Bromophenylphenylether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Sutylbenzylphthalate	ND	0.56	mg/Kg dry	ì		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Carbazole	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
4-Chloroaniline	ND	1.1	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
4-Chloro-3-methylphenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2-Chloronaphthalene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2-Chlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
4-Chlorophenylphenylether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Chrysene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB KLB
Dibenz(a,h)anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19 11/24/19	11/27/19 21:09 11/27/19 21:09	KLB
Dibenzofuran  Di a katalahahalan	ND	0.56	mg/Kg dry	1		SW-846 8270D-E SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Di-n-butylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
1,2-Dichlorobenzene 1,3-Dichlorobenzene	ND ND	0.56 0.56	mg/Kg dry mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
1,4-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
3,3-Dichlorobenzidine	ND	0.38	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2,4-Dichlorophenol	ND	0.56	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Diethylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2,4-Dimethylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Dimethylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
4,6-Dinitro-2-methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2,4-Dinitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2,4-Dinitrotoluene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2,6-Dinitrotoluene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Di-n-octylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
1,2-Diphenylhydrazinc/Azobenzene	ND	0.56	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Fluoranthene	ND	0.28	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Fluorene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

)ate Received: 11/22/2019 Field Sample #: HB-11

Sampled: 11/20/2019 11:00

Sample ID: 19K1403-08 Sample Matrix: Soil

Samble Matrix: Soil		Semi	ivolatile Organic C	ompounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Hexachlorobutadiene	ND	0.56	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Hexachlorocyclopentadiene	ND	0.56	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Hexachloroethane	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Indeno(1,2,3-cd)pyrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Isophorone	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
1-Methylnaphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2-Methylnaphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2-Methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
3/4-Methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Naphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2-Nitroaniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
3-Nitroaniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
4-Nitroaniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Nitrobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2-Nitrophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
N-Nitrosodimethylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
N-Nitrosodi-n-propylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Pentachloronitrobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Pentachlorophenol	ND	0.56	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Phenanthrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Phenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Pyrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Pyridine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
1,2,4-Trichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2,4,5-Trichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
2,4,6-Trichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:09	KLB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
2-Fluorophenol	***	65.4	30-130		***************************************			11/27/19 21:09	
Phenol-d6		68.3	30-130					11/27/19 21:09	
Nitrobenzene-d5		64.8	30-130					11/27/19 21:09	
2-Fluorobiphenyl		69.5	30-130					11/27/19 21:09	
2,4,6-Tribromophenol		74.5	30-130					11/27/19 21:09 11/27/19 21:09	
p-Terphenyl-d14		89.2	30-130					11/4//19 21:09	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019

Field Sample #: HB-11

Sampled: 11/20/2019 11:00

Sample ID: 19K1403-08
Sample Matrix: Soil

			Metals Analy	ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Arsenic	4.9	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Barium	58	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Beryllium	0.53	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Cadmium	ND	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Chromium	14	0.55	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Lead	120	0.82	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Mercury	0.11	0.039	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:50	AJL
Nickel	10	0.55	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Selenium	ND	5.5	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 1:12	TBC
Silver	ND	0.55	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 1:12	TBC
Thallium	ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc
Vanadium	38	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:41	TBC
Zinc	59	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:10	tbc



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-11

Sampled: 11/20/2019 11:00

Sample ID: 19K1403-08
Sample Matrix: Soil

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	60,5		% Wt	1		SM 2540G	11/25/19	11/26/19 10:37	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-14
Sample ID: 19K1403-09

Sample Matrix: Soil

Sampled: 11/20/2019 12:00

Semivolatile	Organic	Compounds	by	GC/MS
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Acenaphthylene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Acetophenone	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Aniline	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Anthracene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Benzidine	ND	1.4	mg/Kg dry	I	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Benzo(a)anthracene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Benzo(a)pyrene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Benzo(b)fluoranthene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Benzo(g,h,i)perylene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Benzo(k)fluoranthene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Benzoic Acid	ND	2.2	mg/Kg dry	ì	L-04	SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Bis(2-chloroethoxy)methane	ND	0.73	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Bis(2-chloroethyl)ether	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Bis(2-chloroisopropyl)ether	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
4-Bromophenylphenylether	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Butylbenzylphthalate	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Carbazole	ND	0.37	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
4-Chloroaniline	ND	1.4	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
4-Chloro-3-methylphenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2-Chloronaphthalene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2-Chlorophenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
4-Chlorophenylphenylether	ND	0.73	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Chrysene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Dibenz(a,h)anthracene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Dibenzofuran	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Di-n-butylphthalate	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
1,2-Dichlorobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
1,3-Dichlorobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
1,4-Dichlorobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
3,3-Dichlorobenzidine	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2,4-Dichlorophenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Diethylphthalate	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2,4-Dimethylphenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Dimethylphthalate	ND	0.73	mg/Kg dry	l		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
4,6-Dinitro-2-methylphenol	ND	0.73	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2,4-Dinitrophenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2,4-Dinitrotoluene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2,6-Dinitrotoluene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Di-n-octylphthalate	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
,2-Diphenylhydrazine/Azobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Fluoranthene	0.39	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Fluorene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

ate Received: 11/22/2019 Field Sample #: HB-14 Sample ID: 19K1403-09

Sample Matrix: Soil

Sampled: 11/20/2019 12:00

Sample Matrix, Soil		Semi	volatile Organic Co	ompounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.73	mg/Kg dry	1	rub Zun	SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Hexachlorobutadiene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Hexachlorocyclopentadiene	ND	0.73	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Hexachloroethane	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Indeno(1,2,3-cd)pyrene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Isophorone	ND	0.73	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
1-Methylnaphthalene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2-Methylnaphthalene	ND	0.37	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2-Methylphenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
3/4-Methylphenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Naphthalene	ND	0.37	mg/Kg dry	ī		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2-Nitroaniline	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
3-Nitroaniline	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
4-Nitroaniline	ND	0.73	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Nitrobenzene	ND	0.73	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2-Nitrophenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
4-Nitrophenol	ND	1.4	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
I-Nitrosodimethylamine	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
N-Nitrosodi-n-propylamine	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Pentachloronitrobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Pentachlorophenol	ND	0.73	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Phenanthrene	ND ND	0.73		1	V-03	SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Phenol			mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Pyridine Pyridine	0.42	0.37	ing/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
•	ND	0.73	mg/Kg dry				11/24/19	11/27/19 21:31	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E			
1,2,4-Trichlorobenzene	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2,4,5-Trichlorophenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
2,4,6-Trichlorophenol	ND	0.73	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:31	KLB
Surrogates		% Recovery	Recovery Limits	1	Flag/Qual			11/05/10 01 31	
2-Fluorophenol		69.8 74.2	30-130 30-130					11/27/19 21:31 11/27/19 21:31	
Phenol-d6 Nitrobenzene-d5		74.2 69.4	30-130					11/27/19 21:31	
2-Fluorobiphenyl		68.2	30-130					11/27/19 21:31	
2,4,6-Tribromophenol		74.4	30-130					11/27/19 21:31	
p-Terphenyl-d14		75.2	30-130					11/27/19 21:31	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019 Field Sample #: HB-14

Sampled: 11/20/2019 12:00

Sample ID: 19K1403-09 Sample Matrix: Soil

Metals Analyses (Total)										
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst	
Antimony	ND	3.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Arsenic	6.3	3.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Barium	54	3.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Beryllium	0.56	0.37	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Cadmium	ND	0.37	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Chromium	15	0.73	mg/Kg dry	I		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Lead	150	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Mercury	0.23	0.054	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:51	AJL	
Nickel	13	0.73	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Selenium	ND	7.3	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 1:18	TBC	
Silver	ND	0.73	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 1:18	TBC	
Thallium	ND	3.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	
Vanadium	54	1.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:47	TBC	
Zinc	73	1.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:16	tbc	



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

rate Received: 11/22/2019
Field Sample #: HB-14

Field Sample #: HB-14
Sample ID: 19K1403-09

Sample Matrix: Soil

Sampled: 11/20/2019 12:00

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	45.7		% Wt	1		SM 2540G	11/25/19	11/26/19 10:38	adb



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-15

Sampled: 11/20/2019 13:00

Sample ID: 19K1403-10
Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS									
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Acenaphthylene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Acetophenone	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Aniline	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Anthracene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Benzidine	ND	0.86	mg/Kg dry	ī	V-35, V-04, V-05	SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Benzo(a)anthracene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Benzo(a)pyrene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Benzo(b)fluoranthene	ND	0.22	mg/Kg dry	t		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Benzo(g,h,i)perylene	ND	0.22	mg/Kg dry	1 .		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Benzo(k)fluoranthene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Benzoic Acid	ND	1.3	mg/Kg dry	l	L-04	SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Bis(2-chlorocthoxy)methane	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Bis(2-chloroethyl)ether	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Bis(2-chloroisopropyl)ether	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.44	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
4-Bromophenylphenylether	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
lutylbenzylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Carbazole	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
4-Chloroaniline	ND	0.86	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
4-Chloro-3-methylphenol	ND	0.86	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2-Chloronaphthalene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2-Chlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
4-Chlorophenylphenylether	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Chrysene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Dibenz(a,h)anthracene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Dibenzofuran	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Di-n-butylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
1,2-Dichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
1,3-Dichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
1,4-Dichlorobenzene	ND	0.44	mg/Kg dry	i		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
3,3-Dichlorobenzidine	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2,4-Dichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Diethylphthalate	ND	0.44	mg/Kg dry	I		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2,4-Dimethylphenol	ND	0.44	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Dimethylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
4,6-Dinitro-2-methylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2,4-Dinitrophenol	ND	0.86	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2,4-Dinitrotoluene	ND	0.44	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2,6-Dinitrotoluene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Di-n-octylphthalate	ND	0.44	mg/Kg dry	ı		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
,2-Diphenylhydrazine/Azobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Fluoranthene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Fluorene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB

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roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Jate Received: 11/22/2019
Field Sample #: HB-15

Sampled: 11/20/2019 13:00

Sample ID: 19K1403-10
Sample Matrix: Soil

		Semi	ivolatile Organic Co	mpounds by	GC/MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Hexachlorobutadiene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Hexachlorocyclopentadiene	ND	0.44	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Hexachloroethane	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Indeno(1,2,3-cd)pyrene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Isophorone	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
1-Methylnaphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2-Methylnaphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2-Methylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
3/4-Methylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Naphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
3-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
4-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Nitrobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2-Nitrophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
4-Nitrophenol	ND	0.86	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
I-Nitrosodimethylamine	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
N-Nitrosodi-n-propylamine	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Pentachloronitrobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Pentachlorophenol	ND	0.44	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Phenanthrene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Phenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Pyrene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Pyridine	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
1,2,4-Trichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2,4,5-Trichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
2,4,6-Trichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 21:54	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		72.7	30-130					11/27/19 21:54	
Phenol-d6		77.1	30-130					11/27/19 21:54	
Nitrobenzene-d5		68.6	30-130					11/27/19 21:54	
2-Fluorobiphenyl		67.6	30-130					11/27/19 21:54	
2,4,6-Tribromophenol		78.9	30-130					11/27/19 21:54	
p-Terphenyl-d14		78.6	30-130					11/27/19 21:54	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Jate Received: 11/22/2019
Field Sample #: HB-15

Sampled: 11/20/2019 13:00

Sample ID: 19K1403-10 Sample Matrix: Soil

Metals Analyses (Total)									
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Antimony	ND	2.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Arsenic	3.8	2.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Barium	46	2.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Beryllium	0.38	0.22	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Cadmium	ND	0.22	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Chromium	11	0.44	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Lead	83	0.66	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Mercury	0.091	0.033	mg/Kg dry	1		SW-846 7471B	11/26/19	11/26/19 18:57	AJL
Nickel	7.2	0.44	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Selenium	ND	4.4	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 1:25	TBC
Silver	ND	0.44	mg/Kg dry	1		SW-846 6010D	11/26/19	12/3/19 1:25	TBC
Thallium	ND	2.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc
Vanadium	26	0.88	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 18:53	TBC
Zinc	45	0.88	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 19:33	tbc



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1403

Date Received: 11/22/2019
Field Sample #: HB-15

Sampled: 11/20/2019 13:00

Sample ID: 19K1403-10
Sample Matrix: Soil

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	76.0		% W1	1		SM 2540G	11/25/19	11/26/19 10:38	adh



## Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
19K1403-01 [HB-1]	B246947	11/25/19
19K1403-02 [HB-5]	B246947	11/25/19
19K1403-03 [HB-6]	B246947	11/25/19
19K1403-04 [HB-7]	B246947	11/25/19
19K1403-05 [HB-8]	B246947	11/25/19
19K1403-06 [HB-9]	B246947	11/25/19
19K1403-07 [HB-10]	B246947	11/25/19
19K1403-08 [HB-11]	B246947	11/25/19
19K1403-09 [HB-14]	B246947	11/25/19
19K1403-10 [HB-15]	B246947	11/25/19

Prep Method: SW-846 3050B-SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19K1403-01 [HB-1]	B247130	1.52	50.0	11/26/19	
19K1403-02 [HB-5]	B247130	1.51	50.0	11/26/19	
19K1403-03 [HB-6]	B247130	1.54	50.0	11/26/19	
19K1403-04 [HB-7]	B247130	1.52	50.0	11/26/19	
19K1403-05 [HB-8]	B247130	1.52	50.0	11/26/19	
19K1403-06 [HB-9]	B247130	1.54	50.0	11/26/19	
19K1403-07 [HB-10]	B247130	1.48	50.0	11/26/19	
19K1403-08 [HB-11]	B247130	1.51	50.0	11/26/19	
C1403-09 [HB-14]	B247130	1.50	50.0	11/26/19	
19K1403-10 [HB-15]	B247130	1.49	50.0	11/26/19	

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19K1403-01 [HB-1]	B247073	0.625	50.0	11/26/19	
19K1403-02 [HB-5]	B247073	0.606	50.0	11/26/19	
19K1403-03 [HB-6]	B247073	0,622	50.0	11/26/19	
19K1403-04 [HB-7]	B247073	0.612	50.0	11/26/19	
19K1403-05 [HB-8]	B247073	0.579	50.0	11/26/19	
19K1403-06 [HB-9]	B247073	0.600	50.0	11/26/19	
19K1403-07 [HB-10]	B247073	0.610	50.0	11/26/19	
19K1403-08 [HB-11]	B247073	0.639	50.0	11/26/19	
19K1403-09 [HB-14]	B247073	0.607	50.0	11/26/19	
19K1403-10 [HB-15]	B247073	0.607	50.0	11/26/19	

Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final (mL)	Date	
19K1403-01 [HB-1]	B246869	30.0	1.00	11/24/19	
19K1403-02 [HB-5]	B246869	30.1	1.00	11/24/19	
19K1403-03 [HB-6]	B246869	30.6	1.00	11/24/19	
19K1403-04 [HB-7]	B246869	30.1	1.00	11/24/19	
19K1403-05 [HB-8]	B246869	30.6	1.00	11/24/19	
K1403-06 [HB-9]	B246869	30.3	1.00	11/24/19	
1403-07 [HB-10]	B246869	30.7	1.00	11/24/19	
19K1403-08 [HB-11]	B246869	30.2	1.00	11/24/19	
19K1403-09 [HB-14]	B246869	30.4	1.00	11/24/19	



## Sample Extraction Data

Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number (Field ID)	Batch	Initial [g]	Final [mL]	Date
19K1403-10 [HB-15]	B246869	30.3	1,00	11/24/19



#### Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
Blank (B246869-BLK1)				Prepared: 11	/24/19 Analy	/zed: 11/27/1	9			
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzidine	ND	0.66	mg/Kg wet							V-04, V-05, V-35
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene Benzoic Acid	ND	0.17	mg/Kg wet							1 04
Benzoic Acid Bis(2-chloroethoxy)methane	ND	1.0	mg/Kg wet							L-04
Bis(2-chloroethoxy)methane Bis(2-chloroethyl)ether	ND	0.34 0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
^-Chloroaniline	ND	0.66	mg/Kg wet							V-34
Chloro-3-methylphenol	ND	0.66	mg/Kg wet							1-34
2-Chloronaphthalene	ND ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
1,2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene Hexachlorocyclopentadiene	ND	0.34 0.34	mg/Kg wet mg/Kg wet							V-05
1exachiorocyclopentagiene 1exachioroethane	ND	0.34	mg/Kg wet							v-u3
leno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
sophorone	ND	0.17	mg/Kg wet							
-Methylnaphthalene	ND	0.34	mg/Kg wet							
Methylnaphthalene	ND ND	0.17	mg/Kg wet							



#### Semivolatile Organic Compounds by GC/MS - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B246869 - SW-846 3546										
Blank (B246869-BLK1)				Prepared: 11	/24/19 Anal	yzed: 11/27/1	9			
2-Methylphenoi	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.34	mg/Kg wet							
3-Nitroaniline	ND	0.34	mg/Kg wet							
4-Nitroaniline	ND	0.34	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							
N-Nitrosodimethylamine	ND	0.34	mg/Kg wet							
N-Nitrosodiphenylamine/Diphenylamine	ND	0.34 0.34	mg/Kg wet mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
Pentachloronitrobenzene Pentachlorophenol	ND	0.34	mg/Kg wet							V-05
Pentaentorophenot Phenanthrene	ND	0.17	mg/Kg wet							¥-03
Phenanthrene Phenol	ND	0.17	mg/Kg wet							
Pyrene	ND ND	0.17	mg/Kg wet							
Pyridine	ND ND	0.34	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND ND	0.34	mg/Kg wet							
' 2,4-Trichlorobenzene	ND ND	0.34	mg/Kg wet							
,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	5.51		mg/Kg wet	6.67		82.7	30-130			<del></del>
Surrogate: 2-Fluorophenoi Surrogate: Phenol-d6	5.60		mg/Kg wet	6.67		84.1	30-130			
Surrogate: Nitrobenzene-d5	2.58		mg/Kg wet	3.33		77.5	30-130			
Surrogate: 2-Fluorobiphenyl	2.76		mg/Kg wet	3.33		82.9	30-130			
Surrogate: 2,4,6-Tribromophenol	5.84		mg/Kg wet	6.67		87.5	30-130			
Surrogate: p-Terphenyl-d14	3.14		mg/Kg wet	3.33		94.3	30-130			
LCS (B246869-BS1)			1	Prepared: 11	/24/19 Anal	yzed: 11/27/1	9			
Acenaphthene	1.09	0.17	mg/Kg wet	1.67		65.7	40-140			
Acenaphthylene	1.17	0.17	mg/Kg wet	1.67		70.0	40-140			
Acetophenone	1.11	0.34	mg/Kg wet	1.67		66.6	40-140			
Aniline	0.809	0.34	mg/Kg wet	1.67		48.5	10-140			
Anthracene	1.25	0.17	mg/Kg wet	1.67		75.0	40-140			
Benzidine	1.85	0.66	mg/Kg wet	1.67		111	40-140			V-04, V-05, V-35
Benzo(a)anthracene	1.20	0.17	mg/Kg wet	1.67		72.2	40-140			
Benzo(a)pyrene	1.17	0.17	mg/Kg wet	1.67		70.2	40-140			
Benzo(b)fluoranthene	1.18	0.17	mg/Kg wet	1.67		71.0	40-140			
Benzo(g,h,i)perylene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140			
Benzo(k)fluoranthene	1.21	0.17	mg/Kg wet	1.67		72.3	40-140			<b>.</b>
Benzoic Acid	0.179	1.0	mg/Kg wet	1.67		10.7 *	30-130			L-04
Bis(2-chloroethoxy)methane	1.11	0.34	mg/Kg wet	1.67		66.6	40-140			
Bis(2-chloroethyl)ether	1.04	0.34	mg/Kg wet	1.67		62.4	40-140			
3is(2-chloroisopropyl)ether	1.13	0.34	mg/Kg wet	1.67		67.6	40-140			
Bis(2-Ethylhexyl)phthalate	1.24	0.34	mg/Kg wet	1.67		74.2	40-140			
4-Bromophenylphenylether	1.17	0.34	mg/Kg wet	1.67		70.3	40-140			
Butylbenzylphthalate	1.23	0.34	mg/Kg wet	1.67		73.6	40-140			
-bazole	1.20	0.17	mg/Kg wet	1.67		72.3 53.6	40-140			V-34
Chloroaniline	0.893	0.66	mg/Kg wet	1.67		53.6 73.7	10-140 30-130			Y=34
4-Chioro-3-methylphenol	1.23	0.66	mg/Kg wet	1.67		73.7 59.2				
-Chloronaphthalene	0.986	0.34	mg/Kg wet	1.67		59.2	40-140			

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## Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
LCS (B246869-BS1)			1	Prepared: 11	/24/19 Analy	zed: 11/27/1	9			
2-Chlorophenol	1.11	0.34	mg/Kg wet	1.67		66.4	30-130			-
l-Chlorophenylphenylether	1.16	0.34	mg/Kg wet	1.67		69.4	40-140			
Chrysene	1.19	0.17	mg/Kg wet	1.67		71.2	40-140			
Dibenz(a,h)anthracene	1.14	0.17	mg/Kg wet	1.67		68.5	40-140			
Dibenzofuran	1,20	0.34	mg/Kg wet	1.67		71.8	40-140			
Di-n-butylphthalate	1.24	0.34	mg/Kg wet	1.67		74.2	40-140			
,2-Dichlorobenzene	1.02	0.34	mg/Kg wet	1.67		61.1	40-140			
,3-Dichlorobenzene	0.991	0.34	mg/Kg wet	1.67		59.5	40-140			
,4-Dichlorobenzene	0.995	0.34	mg/Kg wet	1.67		59.7	40-140			
,3-Dichlorobenzidine	0.946	0.17	mg/Kg wet	1.67		56.8	20-140			
,4-Dichlorophenol	1.13	0.34	mg/Kg wet	1.67		67.6	30-130			
picthylphthalate	1.16	0.34	mg/Kg wet	1.67		69.8	40-140			
,4-Dimethylphenol	1.01	0.34	mg/Kg wet	1.67		60.8	30-130			
Pimethylphthalate	1.16	0.34	mg/Kg wet	1.67		69.7	40-140			
,6-Dinitro-2-methylphenol	1.09	0.34	mg/Kg wet	1.67		65.5	30-130			
,4-Dinitrophenol	0.601	0.66	mg/Kg wet	1.67		36.1	30-130			
4-Dinitrotoluene	1.30	0.34	mg/Kg wet	1.67		78.1	40-140			
6-Dinitrotoluene	1.32	0.34	mg/Kg wet	1.67		79.4	40-140			
ri-n-octylphthalate	1.29	0.34	mg/Kg wet	1.67		77.4	40-140			
2-Diphenylhydrazine/Azobenzene	1.29	0.34	mg/Kg wet	1.67		74.1	40-140			
oranthene	1.24	0.17	mg/Kg wet	1.67		75.0	40-140			
luorene	1.25	0.17	mg/Kg wet	1.67		73.0	40-140			
exachlorobenzene	1.20	0.17	mg/Kg wet	1.67		71.8	40-140			
exachlorobutadiene		0.34	mg/Kg wet	1.67		73.1 59.4	40-140			
exachlorocyclopentadiene	0.990	0.34	mg/Kg wet	1.67		41.5	40-140			V-05
exachloroethane	0.692	0.34	mg/Kg wet	1.67		60.7	40-140			v-03
deno(1,2,3-cd)pyrene	1.01	0.17	mg/Kg wet	1.67		74.6	40-140			
ophorone	1.24	0.17	mg/Kg wet			69.8	40-140			
-Methylnaphthalene	1.16	0.34	mg/Kg wet	1.67 1.67		60.5	40-140 40-140			
-Methylnaphthalene -Methylnaphthalene	1.01	0.17	mg/Kg wet				40-140 40-140			
	1.21		mg/Kg wet	1.67		72.5				
Methylphenol	1.08	0.34		1.67		64.9	30-130			
4-Methylphenol	1.15	0.34	mg/Kg wet	1.67		69.1	30-130			
aphthalene	1.09	0.17	mg/Kg wet	1.67		65.3	40-140			
Nitroaniline	1.30	0.34	mg/Kg wet	1.67		77.8	40-140			
Nitroaniline	1.21	0.34	mg/Kg wet	1.67		72.7	30-140			
Nitroaniline	1.33	0.34	mg/Kg wet	1.67		79.6	40-140			
itrobenzene	1,13	0.34	mg/Kg wet	1.67		67.6	40-140			
Nitrophenol	1.26	0.34	mg/Kg wet	1.67		75.9	30-130			
Nitrophenol	1.39	0.66	mg/Kg wet	1.67		83.4	30-130			
-Nitrosodimethylamine	0.944	0.34	mg/Kg wet	1.67		56.7	40-140			
Nitrosodiphenylamine/Diphenylamine	1.27	0.34	mg/Kg wet	1.67		76.2	40-140			
-Nitrosodi-n-propylamine	1.11	0,34	mg/Kg wet	1.67		66.8	40-140			
ntachloronitrobenzene	1.29	0.34	mg/Kg wet	1.67		77.2	40-140			
ntachlorophenol	0.791	0.34	mg/Kg wet	1.67		47.4	30-130			V-05
enanthrene	1.24	0.17	mg/Kg wet	1.67		74.4	40-140			
enol	1.22	0.34	mg/Kg wet	1.67	•	73.1	30-130			
rene	1.21	0.17	mg/Kg wet	1.67		72.7	40-140			
ridine	0.632	0.34	mg/Kg wet	1.67		37.9	30-140			
4,5-Tetrachlorobenzene	1.04	0.34	mg/Kg wet	1.67		62.5	40-140			
4-Trichlorobenzene	1.03	0.34	mg/Kg wet	1.67		61.9	40-140			
4,5-Trichlorophenol	1.26	0.34	mg/Kg wet	1.67		75.6	30-130			
1,6-Trichlorophenol	1.17	0.34	mg/Kg wet	1.67		70.3	30-130			



## QUALITY CONTROL

#### Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B246869 - SW-846 3546											
LCS (B246869-BS1)				Prepared: 11	/24/19 Anal	yzed: 11/27/1	9				
Surrogate: 2-Fluorophenol	4.87		mg/Kg wet	6.67		73.1	30-130				_
Surrogate: Phenol-d6	5.00		mg/Kg wet	6.67		75.1	30-130				
Surrogate: Nitrobenzene-d5	2.33		mg/Kg wet	3.33		69.9	30-130				
Surrogate: 2-Fluorobiphenyl	2.47		mg/Kg wet	3,33		74.0	30-130				
Surrogate: 2,4,6-Tribromophenol	6.16		mg/Kg wet	6.67		92.4	30-130				
Surrogate: p-Terphenyl-d14	2.80		mg/Kg wet	3.33		83.9	30-130				
LCS Dup (B246869-BSD1)				Prepared: 11	/24/19 Anal	yzed: 11/27/1	9				
Acenaphthene	1.14	0.17	mg/Kg wet	1.67		68.5	40-140	4.26	30		
Acenaphthylene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	2.26	30		
Acetophenone	1.22	0.34	mg/Kg wet	1.67		73.4	40-140	9.71	30		
Aniline	0.956	0.34	mg/Kg wet	1.67		57.4	10-140	16.7	50		† ‡
Anthracene	1.29	0.17	mg/Kg wet	1.67		77.3	40-140	2.97	30		
Benzidine	1.92	0.66	mg/Kg wet	1.67		115	40-140	4.03	30	V-04, V-05, V-35	
Benzo(a)anthracene	1.24	0.17	mg/Kg wet	1.67		74.3	40-140	2.87	30		
Benzo(a)pyrene	1.21	0.17	mg/Kg wet	1.67		72.6	40-140	3.33	30		
Benzo(b)fluoranthene	1.29	0.17	mg/Kg wet	1.67		77.4	40-140	8.54	30		
Benzo(g,h,i)perylene	1.33	0.17	mg/Kg wet	1.67		79.8	40-140	14.7	30		
Benzo(k)fluoranthene	1.30	0.17	mg/Kg wet	1.67		78.1	40-140	7.69	30		
Benzoic Acid	0.168	1.0	mg/Kg wet	1.67		10.1 *	30-130	6.35	50	L-04	‡
(2-chloroethoxy)methane	1.20	0.34	mg/Kg wet	1.67		72.3	40-140	8.27	30		
s(2-chloroethyl)ether	1.16	0.34	mg/Kg wet	1.67		69.7	40-140	11.2	30		
Bis(2-chloroisopropyl)ether	1.26	0.34	mg/Kg wet	1.67		75.4	40-140	10.9	30		
Bis(2-Ethylhexyl)phthalate	1.25	0.34	mg/Kg wet	1.67		75.2	40-140	1.34	30		
4-Bromophenylphenylether	1.26	0.34	mg/Kg wet	1.67		75.7	40-140	7.37	30		
Butylbenzylphthalate	1.26	0.34	mg/Kg wet	1.67		75.8	40-140	2.86	30		
Carbazole	1.22	0.17	mg/Kg wet	1.67		73.4	40-140	1.59	30	37.24	†
4-Chloroaniline	0.976	0.66	mg/Kg wet	1.67		58.5	10-140	8.81 5.01	30 30	V-34	'
4-Chloro-3-methylphenol	1.17	0.66 0.34	mg/Kg wet mg/Kg wet	1.67		70.1	30-130 40-140	7.79	30 30		
2-Chlorophanal	1.07	0.34	mg/Kg wet	1.67		64.0		10.3			
2-Chlorophenol 4-Chlorophenylphenylether	1.23	0.34	mg/Kg wet	1.67 1.67		73.6 69.5	30-130 40-140	0.0576	30 30		
	1.16	0.34	mg/Kg wet	1.67		72.7	40-140	2.08	30		
Chrysene Dibenz(a,h)anthracene	1.21	0.17	mg/Kg wet	1.67		74.6	40-140	8.55	30		
Dibenzofuran	1.24	0.17	mg/Kg wet	1.67		72.3	40-140	0.777	30		
Di-n-butylphthalate	1.21 1.26	0.34	mg/Kg wet	1.67		75.8	40-140	2.13	30		
1,2-Dichlorobenzene	1.14	0.34	mg/Kg wet	1.67		68.3	40-140	11.1	30		
1,3-Dichlorobenzene	1.10	0.34	mg/Kg wet	1.67		66.0	40-140	10.4	30		
1,4-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.67		66.5	40-140	10.8	30		
3,3-Dichlorobenzidine	1.07	0.17	mg/Kg wet	1.67		64.1	20-140	12.1	50		†‡
2,4-Dichlorophenol	1.17	0.34	mg/Kg wet	1.67		70.3	30-130	3.92	30		
Diethylphthalate	1.15	0.34	mg/Kg wet	1.67		68.8	40-140	1.36	30		
2,4-Dimethylphenol	1.07	0.34	mg/Kg wet	1.67		63.9	30-130	4.94	30		
Dimethylphthalate	1.19	0.34	mg/Kg wet	1.67		71.4	40-140	2.47	30		
4,6-Dinitro-2-methylphenol	1.09	0.34	mg/Kg wet	1.67		65.5	30-130	0.0916	30		
2,4-Dinitrophenol	0.557	0.66	mg/Kg wet	1.67		33.4	30-130	7.71	30		
2,4-Dinitrotoluene	1.25	0.34	mg/Kg wet	1.67		74.8	40-140	4.34	30		
2,6-Dinitrotoluene	1.33	0.34	mg/Kg wet	1.67		79.9	40-140	0.653	30		
-n-octylphthalate	1.54	0.34	mg/Kg wet	1.67		92.4	40-140	17.6	30		
-Diphenylhydrazine/Azobenzene	1.35	0.34	mg/Kg wet	1.67		80.8	40-140	8.63	30		
Fluoranthene	1.27	0.17	mg/Kg wet	1.67		76.4	40-140	1.85	30		
		0.17	mg/Kg wet			70.4	40-140	1.91	30		



## Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B246869 - SW-846 3546											
LCS Dup (B246869-BSD1)				Prepared: 11	1/24/19 Analy	zed: 11/27/	19				_
Hexachlorobenzene	1.31	0.34	mg/Kg wet	1.67		78.9	40-140	4.86	30		-
Hexachlorobutadiene	1.13	0.34	mg/Kg wet	1.67		67.6	40-140	12.9	30		
Hexachlorocyclopentadiene	0.678	0.34	mg/Kg wet	1.67		40.7	40-140	1.99	30	V-05	
Hexachloroethane	1,11	0.34	mg/Kg wet	1.67		66.4	40-140	8.96	30		
Indeno(1,2,3-cd)pyrene	1.37	0.17	mg/Kg wet	1.67		82.0	40-140	9.48	30		
Isophorone	1.24	0.34	mg/Kg wet	1.67		74.7	40-140	6.67	30		
1-Methylnaphthalene	1.05	0.17	mg/Kg wet	1.67		63.0	40-140	4.05	30		
2-Methylnaphthalenc	1.27	0.17	mg/Kg wet	1.67		76.0	40-140	4.69	30		
2-Methylphenol	1.17	0.34	mg/Kg wet	1.67		70.1	30-130	7.79	30		
3/4-Methylphenol	1.21	0.34	mg/Kg wet	1.67		72.4	30-130	4.66	30		
Naphthalene	1.19	0.17	mg/Kg wet	1.67		71.4	40-140	8.92	30		
2-Nitroaniline	1.28	0.34	mg/Kg wet	1.67		76.7	40-140	1.50	30		
3-Nitroaniline	1.20	0.34	mg/Kg wet			72.3	30-140	0.607	30		†
4-Nitroaniline	1.23	0.34	mg/Kg wet			74.1	40-140	7.19	30		
Nitrobenzene	1.24	0.34	mg/Kg wet			74.1	40-140	9.29	30		
2-Nitrophenol	1.39	0.34	mg/Kg wet			83.7	30-130	9.75	30		
4-Nitrophenol	1.26	0.66	mg/Kg wet			75.8	30-130	9.53	50		‡
N-Nitrosodimethylamine	1.04	0.34	mg/Kg wet			62.4	40-140	9.71	30		•
N-Nitrosodiphenylamine/Diphenylamine	1.36	0.34	mg/Kg wet			81.4	40-140	6.58	30		
N-Nitrosodi-n-propylamine	1.21	0.34	mg/Kg wet			72.5	40-140	8.15	30		
tachloronitrobenzene	1.30	0.34	mg/Kg wet			78.1	40-140	1.16	30		
ntachlorophenol	0.770	0.34	mg/Kg wet			46.2	30-130	2.65	30	V-05	
Phenanthrene	1.27	0.17	mg/Kg wet			76.2	40-140	2.39	30	V-03	
Phenol	1.32	0.34	mg/Kg wet			79.1	30-130	7.99	30		
Pyrene	1.25	0.17	mg/Kg wet			75.2	40-140	3.41	30		
Pyridine	0.687	0.34	mg/Kg wet			41.2	30-140	8.34	30		†
1,2,4,5-Tetrachlorobenzene	1.20	0.34	mg/Kg wet	1.67		72.2	40-140	14.3	30		,
1,2,4-Trichlorobenzene		0.34	mg/Kg wet	1.67		69.6	40-140	11.8	30		
2,4,5-Trichlorophenol	1.16	0.34	mg/Kg wet	1.67		77.3	30-130	2.12	30		
2,4,6-Trichlorophenol	1.29 1.24	0.34	mg/Kg wet	1.67		74.2	30-130	5.43	30		
Surrogate: 2-Fluorophenol	5.38		mg/Kg wet	6.67		80.7	30-130				-
Surrogate: Phenol-d6	5.28		mg/Kg wet	6.67		79.3	30-130				
Surrogate: Nitrobenzene-d5	2.52		mg/Kg wet	3.33		75.7	30-130				
Surrogate: 2-Fluorobiphenyl	2.68		mg/Kg wet	3.33		80.6	30-130				
Surrogate: 2,4,6-Tribromophenol	5.69		mg/Kg wet	6.67		85.4	30-130				
Surrogate: p-Terphenyl-d14	2.84		mg/Kg wet	3.33		85.1	30-130				
Matrix Spike (B246869-MS1)	Sour	ce: 19K1403	-02	Prepared: 11	/24/19 Analy:	zed: 11/27/	19				
Acenaphthene	1.33	0.21	mg/Kg dry	2.08	ND	64.0	40-140				-
Acenaphthylene	1.40	0.21	mg/Kg dry	2.08	ND	67.4	40-140				
Acetophenone	1.46	0.42	mg/Kg dry	2.08	ND	70.2	40-140				
Aniline	0.971	0.42	mg/Kg dry	2.08	ND	46.8	40-140				
Anthracene	1.43	0.21	mg/Kg dry	2.08	ND	68.8	40-140				
Benzidine	0.137	0.82	mg/Kg dry	2.08	ND	6.58 *	40-140			MS-09, V-04,	
Benzo(a)anthracene	1.41	0.21	mg/Kg dry	2.08	ND	67.7	40-140			V-05, V-35	
Benzo(a)pyrene	1.30	0.21	mg/Kg dry	2.08	ND	62.7	40-140				
Benzo(b)fluoranthene	1.36	0.21	mg/Kg dry	2.08	ND	65.4	40-140				
Benzo(g,h,i)perylene	1.37	0.21	mg/Kg dry	2.08	ND	66.1	40-140				
zo(k)fluoranthene	1.39	0.21	mg/Kg dry	2.08	ND	66.7	40-140				
nzoic Acid	0.348	1.2	mg/Kg dry	2.08	ND	16.8 *	40-140			MS-09	
Bis(2-chloroethoxy)methane	1.39	0.42	mg/Kg dry	2.08	ND	67.1	40-140				
Bis(2-chloroethyl)ether	1.41	0.42	mg/Kg dry	2.08	ND	67.9	40-140				
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#### Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546	***************************************					Magazina and a same and a same and a same a same a same a same a same a same a same a same a same a same a sam				
Matrix Spike (B246869-MS1)	Sour	rce: 19K1403	-02	Prepared: 11	/24/19 Analyz	ed: 11/27/	19			
Bis(2-chloroisopropyl)ether	1.49	0.42	mg/Kg dry	2.08	ND	71.7	40-140			
Bis(2-Ethylhexyl)phthalate	1.62	0.42	mg/Kg dry	2.08	0.357	60.8	40-140			
4-Bromophenylphenylether	1.40	0.42	mg/Kg dry	2.08	ND	67.2	40-140			
Butylbenzylphthalate	1.47	0.42	mg/Kg dry	2.08	0.283	57.4	40-140			
Carbazole	1.38	0.21	mg/Kg dry	2.08	ND	66.6	40-140			
4-Chloroaniline	0.985	0.82	mg/Kg dry	2.08	ND	47.5	40-140			V-34
I-Chloro-3-methylphenol	1.39	0.82	mg/Kg dry	2.08	ND	66.9	30-130			
2-Chloronaphthalene	1.24	0.42	mg/Kg dry	2.08	ND	59.7	40-140			
2-Chlorophenol	1.43	0.42	mg/Kg dry	2.08	ND	68.7	30-130			
I-Chlorophenylphenylether	1.35	0.42	mg/Kg dry	2.08	ND	65.1	40-140			
Chrysene	1.38	0.21	mg/Kg dry	2.08	ND	66.6	40-140			
Dibenz(a,h)anthracene	1.32	0.21	mg/Kg dry	2.08	ND	63.8	40-140			
Dibenzofuran	1.40	0.42	mg/Kg dry	2.08	ND	67.7	40-140			
Di-n-butylphthalate	1.43	0.42	mg/Kg dry	2.08	ND	68.7	40-140			
,2-Dichlorobenzene	1.35	0.42	mg/Kg dry	2.08	ND	65.2	40-140			
,3-Dichlorobenzene	1.31	0.42	mg/Kg dry	2.08	ND	63.2	40-140			
,4-Dichlorobenzene	1.33	0.42	mg/Kg dry	2.08	ND	64.2	40-140			
3,3-Dichlorobenzidine	0.956	0.21	mg/Kg dry	2.08	ND	46.0	40-140 ´			
,4-Dichlorophenol	1.25	0.42	mg/Kg dry	2.08	ND	60.0	30-130			
Diethylphthalate	1.32	0.42	mg/Kg dry	2.08	ND	63.6	40-140			
-Dimethylphenol	1.10	0.42	mg/Kg dry	2.08	ND	52.9	30-130			
methylphthalate	1.38	0.42	mg/Kg dry	2.08	ND	66.4	40-140			
,6-Dinitro-2-methylphenol	1.44	0.42	mg/Kg dry	2.08	ND	69.4	30-130			
,4-Dinitrophenol	1.12	0.82	mg/Kg dry	2.08	ND	53.8	30-130			
,4-Dinitrotoluene	1.45	0.42	mg/Kg dry	2.08	ND	69.8	40-140			
,6-Dinitrotoluene	1.56	0.42	mg/Kg dry	2.08	ND	75.2	40-140			
Di-n-octylphthalate	1.63	0.42	mg/Kg dry	2.08	ND	78.3	40-140			
,2-Diphenylhydrazine/Azobenzene	1.49	0.42	mg/Kg dry	2.08	ND	71.8	40-140			
luoranthene	1.50	0.21	mg/Kg dry	2.08	0.154	64.6	40-140			
luorene	1.38	0.21	mg/Kg dry	2.08	ND	66.2	40-140			
<b>Mexachlorobenzene</b>	1.46	0.42	mg/Kg dry	2.08	ND	70.1	40-140			
dexachlorobutadiene	1.29	0.42	mg/Kg dry	2.08	ND	62.2	40-140			
lexachlorocyclopentadiene	0.821	0.42	mg/Kg dry	2.08	ND	39.6	30-130			V-05
lexachloroethane	1.32	0.42	mg/Kg dry	2.08	ND	63.4	40-140			
ndeno(1,2,3-cd)pyrene	1.45	0.21	mg/Kg dry	2.08	ND	69.6	40-140			
sophorone	1.46	0.42	mg/Kg dry	2.08	ND	70.2	40-140			
-Methylnaphthalene	1.24	0.21	mg/Kg dry	2.08	ND	59.9	40-140			
-Methylnaphthalene	1.51	0.21	mg/Kg dry	2.08	ND	72.5	40-140			
-Methylphenol	1.31	0.42	mg/Kg dry	2.08	ND	63.0	30-130			
/4-Methylphenol	1.39	0.42	mg/Kg dry	2.08	ND	67.0	30-130			
Japhthalene	1.41	0.21	mg/Kg dry	2.08	ND	68.0	40-140			
-Nitroaniline	1.49	0.42	mg/Kg dry	2.08	ND	71.8	40-140			
-Nitroaniline	1.29	0.42	mg/Kg dry	2.08	ND	62.3	40-140			
-Nitroaniline	1.33	0.42	mg/Kg dry	2.08	ND	63.8	40-140			
litrobenzene	1.46	0.42	mg/Kg dry	2.08	ND	70.3	40-140			
-Nitrophenol	1.46	0.42	mg/Kg dry	2.08	ND	77.3	30-130			
-Nitrophenol	1.43	0.42	mg/Kg dry	2.08	ND	69.1	30-130			
I-Nitrosodimethylamine	1.43	0.42	mg/Kg dry	2.08	ND	59.7	40-140			
Vitrosodiphenylamine/Diphenylamine		0.42	mg/Kg dry	2.08	ND ND	71.2	40-140			
litrosodi-n-propylamine	1.48	0.42	mg/Kg dry	2.08	ND ND	70.0	40-140 40-140			
entachloronitrobenzene	1.45	0.42	mg/Kg dry mg/Kg dry	2.08	ND ND	70.0 71.5	40-140 40-140			
	1.49	U.42		2.00	מא	, 1.0	-10-14U			



## Semivolatile Organic Compounds by GC/MS - Quality Control

	<b>.</b> .	Reporting	71.4	Spike	Source	0/BCC	%REC	ממק	RPD Limit	Mata
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B246869 - SW-846 3546										
Matrix Spike (B246869-MS1)	Sour	ce: 19K1403			/24/19 Analyz					
Phenanthrene	1.46	0.21	mg/Kg dry	2.08	ND	70.4	40-140			
Phenol	1.53	0.42	mg/Kg dry	2.08	ND	73.6	30-130			
Pyrene	1.53	0.21	mg/Kg dry	2.08	0.176	65.1	40-140			
Pyridine	0.782	0.42	mg/Kg dry	2.08	ND	37.7 *	40-140			MS-09
1,2,4,5-Tetrachlorobenzene	1.37	0.42	mg/Kg dry	2.08	ND	65.8	40-140			
1,2,4-Trichlorobenzene	1.34	0.42	mg/Kg dry	2.08	ND	64.6	40-140			
2,4,5-Trichlorophenol	1.43	0.42	mg/Kg dry	2.08	ND	68.9	30-130			
2,4,6-Trichlorophenol	1.38	0.42	mg/Kg dry	2.08	ND	66.3	30-130			
Surrogate: 2-Fluorophenol	6.11		mg/Kg dry	8.30		73.6	30-130			
Surrogate: Phenol-d6	6.26		mg/Kg dry	8.30		75.3	30-130			
Surrogate: Nitrobenzene-d5	2.97		mg/Kg dry	4.15		71.4	30-130			
Surrogate: 2-Fluorobiphenyl	3.09		mg/Kg dry	4.15		74.4	30-130			
Surrogate: 2,4,6-Tribromophenol	6.31		mg/Kg dry	8.30		76.0	30-130			
Surrogate: p-Terphenyl-d14	3.30		mg/Kg dry	4.15		79.4	30-130			
Matrix Spike Dup (B246869-MSD1)	Sour	ce: 19K1403	-02	Prepared: 11	/24/19 Analyz	ed: 11/27/1	9			
Acenaphthene	1.36	0.21	mg/Kg dry	2.08	ND	65.6	40-140	2.41	30	
Acenaphthylene	1.44	0.21	mg/Kg dry	2.08	ND	69.3	40-140	2.72	30	
Acetophenone	1.46	0.42	mg/Kg dry	2.08	ND	70.3	40-140	0.114	30	
Aniline	0.849	0.42	mg/Kg dry	2.08	ND	40.9	40-140	13.4	30	
hracene	1.48	0.21	mg/Kg dry	2.08	ND	71.2	40-140	3.40	30	
enzidine	0.0855	0.82	mg/Kg dry	2.08	ND	4.12 *	40-140		30	V-35, MS-09, V-04, V-05
Benzo(a)anthracene	1.47	0.21	mg/Kg dry	2.08	ND	70.6	40-140	4.28	30	
Benzo(a)pyrene	1.40	0.21	mg/Kg dry	2.08	ND	67.2	40-140	6.89	30	
Benzo(b)fluoranthene	1.40	0.21	mg/Kg dry	2.08	ND	67.3	40-140	2.92	30	
Benzo(g,h,i)perylene	1.55	0.21	mg/Kg dry	2.08	ND	74.8	40-140	12.3	30	
Benzo(k)fluoranthene	1.39	0.21	mg/Kg dry	2.08	ND	67.1	40-140	0.538	30	
Benzoic Acid	0.414	1.2	mg/Kg dry	2.08	ND	19.9 *	40-140		30	MS-09
Bis(2-chloroethoxy)methane	1.44	0.42	mg/Kg dry	2.08	ND	69.1	40-140	2.97	30	
Bis(2-chloroethyl)ether	1.41	0.42	mg/Kg dry	2.08	ND	67.8	40-140	0.265	30	
Bis(2-chloroisopropyl)ether	1.51	0.42	mg/Kg dry	2.08	ND	72.6	40-140	1.22	30	
Bis(2-Ethylhexyl)phthalate	1.74	0.42	mg/Kg dry	2.08	0.357	66.6	40-140	7.19	30	
4-Bromophenylphenylether	1.40	0.42	mg/Kg dry	2.08	ND	67.7	40-140	0.623	30	
Butylbenzylphthalate	1,54	0.42	mg/Kg dry	2.08	0.283	60.7	40-140	4.49	30	
Carbazole	1.41	0.21	mg/Kg dry	2.08	ND	68.1	40-140	2.17	30	
4-Chloroaniline	0.922	0.82	mg/Kg dry	2.08	ND	44.4	40-140	6.62	30	V-34
4-Chloro-3-methylphenol	1.41	0.82	mg/Kg dry	2.08	ND	67.7	30-130	1.28	30	
2-Chloronaphthalene	1.26	0.42	mg/Kg dry	2.08	ND	60.8	40-140	1.86	30	
2-Chlorophenol	1.43	0.42	mg/Kg dry	2.08	ND	69.0	30-130	0.494	30	
4-Chlorophenylphenylether	1.37	0.42	mg/Kg dry	2.08	ND	66.0	40-140	1.37	30	
Chrysene	1.44	0.21	mg/Kg dry	2.08	ND	69.5	40-140	4.17	30	
Dibenz(a,h)anthracene	1.42	0.21	mg/Kg dry	2.08	ND	68.4	40-140	7.05	30	
Dibenzofuran	1.44	0.42	mg/Kg dry	2.08	ND	69.2	40-140	2.28	30	
Di-n-butylphthalate	1.46	0.42	mg/Kg dry	2.08	ND	70.3	40-140	2.22	30	
1,2-Dichlorobenzene	1.36	0.42	mg/Kg dry	2.08	ND	65.6	40-140	0.520	30	
1,3-Dichlorobenzene	1.31	0.42	mg/Kg dry	2.08	ND	63.3	40-140	0.0633	30	
I,4-Dichlorobenzene	1.33	0.42	mg/Kg dry	2.08	ND	63.9	40-140	0.437	30	
3 3-Dichlorobenzidine	0.882	0.21	mg/Kg dry	2.08	ND	42.5	40-140	8.09	30	
Dichlorophenol	1.28	0.42	mg/Kg dry	2.08	ND	61.5	30-130	2.40	30	
piethylphthalate	1.36	0.42	mg/Kg dry	2.08	ND	65.6	40-140	3.13	30	
2,4-Dimethylphenol	1.12	0.42	mg/Kg dry	2.08	ND	54.1	30-130	2.24	30	
-1	1.12	0.42	mg/Kg dry	2.08	ND	67.2	40-140	1.23	30	

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## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
Matrix Spike Dup (B246869-MSD1)	Sou	rce: 19K1403	-02	Prepared: 11	1/24/19 Analy:	zed: 11/27/1	9			
4,6-Dinitro-2-methylphenol	1.45	0.42	mg/Kg dry	2.08	ND	69.7	30-130	0.402	30	
2,4-Dinitrophenol	1.12	0.82	mg/Kg dry	2.08	ND	53.9	30-130	0.334	30	
2,4-Dinitrotoluene	1.50	0.42	mg/Kg dry	2.08	ND	72.4	40-140	3.71	30	
2,6-Dinitrotoluene	1.62	0.42	mg/Kg dry	2.08	ND	77.8	40-140	3.45	30	
Di-n-octylphthalate	1.63	0.42	mg/Kg dry	2.08	ND	78.5	40-140	0.255	30	
,2-Diphenylhydrazine/Azobenzene	1.50	0.42	mg/Kg dry	2.08	ND	72.1	40-140	0.473	30	
Fluoranthene	1.57	0.21	mg/Kg dry	2.08	0.154	68.0	40-140	4.64	30	
Fluorene	1.42	0.21	mg/Kg dry	2.08	ND	68.2	40-140	2.89	30	
Hexachlorobenzene	1.46	0.42	mg/Kg dry	2.08	ND	70.4	40-140	0.370	30	
Hexachlorobutadiene	1,31	0.42	mg/Kg dry	2.08	ND	62.9	40-140	1.12	30	
Hexachlorocyclopentadiene	0.820	0.42	mg/Kg dry	2.08	ND	39.5	30-130	0.202	30	V-05
Hexachloroethane	1.33	0.42	mg/Kg dry	2.08	ND	63.9	40-140	0.880	30	
ndeno(1,2,3-cd)pyrene	1.63	0.21	mg/Kg dry	2.08	ND	78.3	40-140	11.7	30	
sophorone	1.50	0.42	mg/Kg dry	2.08	ND	72.3	40-140	2.92	30	
-Methylnaphthalene	1.28	0.21	mg/Kg dry	2.08	ND	61.6	40-140	2.76	30	
2-Methylnaphthalene	1.55	0.21	mg/Kg dry	2.08	ND	74.7	40-140	2.88	30	
2-Methylphenol	1.33	0.42	mg/Kg dry	2.08	ND	64.1	30-130	1.67	30	
3/4-Methylphenol	1.40	0.42	mg/Kg dry	2.08	ND	67.5	30-130	0.654	30	
Naphthalene	1.45	0.21	mg/Kg dry	2.08	ND	69.8	40-140	2.58	30	
?-Nitroaniline	1.53	0.42	mg/Kg dry	2.08	ND	73.6	40-140	2.53	30	
itroaniline	1.30	0.42	mg/Kg dry	2.08	ND	62.8	40-140	0.831	30	
-Nitroaniline	1.36	0.42	mg/Kg dry	2.08	ND	65.6	40-140	2.75	30	
Vitrobenzene	1.49	0.42	mg/Kg dry	2.08	ND	71.6	40-140	1.89	30	
2-Nitrophenol	1.65	0.42	mg/Kg dry	2.08	ND	79.5	30-130	2.78	30	
-Nitrophenol	1.50	0.82	mg/Kg dry	2.08	ND	72.3	30-130	4.53	30	
N-Nitrosodimethylamine	1.27	0.42	mg/Kg dry	2.08	ND	61.0	40-140	2.16	30	
N-Nitrosodiphenylamine/Diphenylamine	1.51	0.42	mg/Kg dry	2.08	ND	72.7	40-140	2.14	30	
N-Nitrosodi-n-propylamine	1.46	0.42	mg/Kg dry	2.08	ND	70.3	40-140	0.542	30	
Pentachloronitrobenzene	1.47	0.42	mg/Kg dry	2.08	ND	71.0	40-140	0.730	30	
Pentachlorophenol	0.876	0.42	mg/Kg dry	2.08	ND	42.2	30-130	0.990	30	V-05
Phenanthrene	1.52	0.21	mg/Kg dry	2.08	ND	73.1	40-140	3.65	30	
Phenol	1.53	0.42	mg/Kg dry	2.08	ND	73.5	30-130	0.163	30	
Pyrene	1.65	0.21	mg/Kg dry	2.08	0.176	70.9	40-140	7.64	30	
yridine	0.778	0.42	mg/Kg dry	2.08	ND	37.5 *	40-140	0.532	30	MS-09
,2,4,5-Tetrachlorobenzene	1.38	0.42	mg/Kg dry	2.08	ND	66.5	40-140	1.15	30	
,2,4-Trichlorobenzene	1.37	0.42	mg/Kg dry	2.08	ND	65.9	40-140	1.93	30	
,4,5-Trichlorophenol	1.45	0.42	mg/Kg dry	2.08	ND	69.7	30-130	1.10	30	
,4,6-Trichlorophenol	1.39	0.42	mg/Kg dry	2.08	ND	67.0	30-130	0.930	30	
urrogate: 2-Fluorophenol	6.09		mg/Kg dry	8.30		73.3	30-130			
surrogate: Phenol-d6	6.22		mg/Kg dry	8.30		74.9	30-130			
surrogate: Prienoi-do	3.06		mg/Kg dry	4.15		73.8	30-130			
surrogate: 2-Fluorobiphenyl	3.13		mg/Kg dry	4.15		75.5	30-130			
surrogate: 2,4,6-Tribromophenol	6.47		mg/Kg dry	8.30		77.9	30-130			
urrogate: p-Terphenyl-d14	3.49		mg/Kg dry	4.15		84.0	30-130			



## QUALITY CONTROL

## Metals Analyses (Total) - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B247073 - SW-846 7471										
Blank (B247073-BLK1)				Prepared & A	Analyzed: 11	/26/19				
Mercury	ND	0.025	mg/Kg wet		-					
LCS (B247073-BS1)				Prepared & A	Analyzed: 11	/26/19				
Mercury	2.36	0.38	mg/Kg wet	2.93		80.4	71.3-128.7			
LCS Dup (B247073-BSD1)				Prepared & A	Analyzed: 11/	/26/19				
Mercury	2.70	0.38	mg/Kg wet	2.93		92.0	71.3-128.7	13.5	20	
Batch B247130 - SW-846 3050B										
Blank (B247130-BLK1)				Prepared: 11.	/26/19 Analy	zed: 11/27/	19			
Antimony	ND	1.7	mg/Kg wet							***************************************
Arsenic	ND	1.7	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
3eryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.17	mg/Kg wet							
Chromium	ND	0.33	mg/Kg wet							
ead	ND	0.50	mg/Kg wet							
lickel	ND	0.33	mg/Kg wet							
elenium	ND	3.3	mg/Kg wet							
ilver	ND	0.33	mg/Kg wet							
'tallium	ND	1.7	mg/Kg wet							
ıadium	ND	0.67	mg/Kg wet							
inc	ND	0.67	mg/Kg wet							
.CS (B247130-BS1)				Prepared: 11/	/26/19 Analy	zed: 11/27/	19			
antimony	106	5.0	mg/Kg wet	147		72.0	6.3-208			
rsenic	129	5.0	mg/Kg wet	143		89.9	82.4-116.8			
arium 	420	5.0	mg/Kg wet	415		101	81.7-118.5			
eryllium	181	0.50	mg/Kg wet	179		101	82.6-116.8			
admium	56.2	0.50	mg/Kg wet	56.2		100	82.2-117.5			
hromium	94.8	0.99	mg/Kg wet	101		93.8	82-118.2			
ead	117	1.5	mg/Kg wet	125		93.9	82.3-117.1			
lickel	111	0.99	mg/Kg wet	108		103	82.6-117.4			
elenium	69.4	9.9	mg/Kg wet	77.9		89.1	79.3-120.7			
ilver hallium	36.6	0.99	mg/Kg wet	34.3		107	79.3-120.7			
	118	5.0	mg/Kg wet	113		105	80.5-119.1			
anadium inc	70.4 228	2.0 2.0	mg/Kg wet mg/Kg wet	83.7 240		84.2 95.1	78.6-120.8 80.3-119.4			
CS Dup (B247130-BSD1)				Prepared: 11/	/26/19 Analv					
ntimony	96.5	4.7	mg/Kg wet	147		65.6	6.3-208	9.27	30	
rsenic	96.3 117	4.7	mg/Kg wet	143			82.4-116.8	9.50	30	L-07
arium	384	4.7	mg/Kg wet	415		92.5	81.7-118.5	8.86	20	_ • • •
eryllium	167	0.47	mg/Kg wet	179		93.4	82.6-116.8	7.87	30	
admium	50.9	0.47	mg/Kg wet	56.2		90.5	82.2-117.5	9.98	20	
hromium	86.2	0.94	mg/Kg wet	101		85.4	82-118.2	9.41	30	
ead	106	1.4	mg/Kg wet	125		85.0	82.3-117.1	9.99	30	
ickel	99.9	0.94	mg/Kg wet	108		92.5	82.6-117.4	10.5	30	
elenium	64.1	9.4	mg/Kg wet	77.9		82.3	79.3-120.7	7.93	30	
¹ver	33.2	0.94	mg/Kg wet	34.3		96.8	79.3-120.7	9.81	30	
llium	111	4.7	mg/Kg wet	113		97.9	80.5-119.1	6.69	30	
anadium	64.0	1.9	mg/Kg wet	83.7		76.5 *	78.6-120.8	9.56	30	L-07
inc	206	1.9	mg/Kg wet	240		85.6	80.3-119.4	10.4	30	

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#### QUALITY CONTROL

#### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B247130 - SW-846 3050B										
MRL Check (B247130-MRL1)				Prepared: 11	/26/19 Anal	yzed: 11/27/1	9			
Lead	0.471	0.50	mg/Kg wet	0.500		94.2	80-120			



## Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B246947 - % Solids										
Duplicate (B246947-DUP1)	Sou	rce: 19K1403-0	1	Prepared: 11	/25/19 Anal	yzed: 11/26/1	9			
% Solids	59.0		% Wt		66.3			11.6	20	
Duplicate (B246947-DUP2)	Sou	rce: 19K1403-0	2	Prepared: 11	/25/19 Anal	yzed: 11/26/1	9			
% Solids	79.5		% Wt		80.3			1.03	20	
Duplicate (B246947-DUP3)	Sou	rce: 19K1403-03	3	Prepared: 11	/25/19 Anal	yzed: 11/26/1	9			
% Solids	53.9		% Wt		55.9	)		3.51	20	
Duplicate (B246947-DUP4)	Sou	rce: 19K1403-04	4	Prepared: 11	/25/19 Analy	yzed: 11/26/1	9			
% Solids	52.1		% Wt		53.1			1.88	20	
Duplicate (B246947-DUP5)	Sou	rce: 19K1403-0	5	Prepared: 11	/25/19 Anal	yzed: 11/26/1	9			
% Solids	44.7		% Wt		45.7	•		2.12	20	
Duplicate (B246947-DUP6)	Sou	rce: 19K1403-0	б	Prepared: 11	/25/19 Anal	yzed: 11/26/1	9			
% Solids	40.3		% Wt		42.7			5.74	20	



V-34

V-35

compound. Reported result is estimated.

compound. Reported result is estimated.

## 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits.  Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this



## CERTIFICATIONS

ertified Analyses included in this Report

Analyta	Certifications	
Analyte	Cu dillations	
SW-846 6010D in Soil		
Antimony	CT,NH,NY,ME,VA,NC	
Arsenic	CT,NH,NY,ME,VA,NC	
Barium	CT,NH,NY,ME,VA,NC	
Beryllium	CT,NH,NY,ME,VA,NC	
Cadmium	CT,NH,NY,ME,VA,NC	
Chromium	CT,NH,NY,ME,VA,NC	
Lead	CT,NH,NY,AIHA,ME,VA,NC	
Nickel	CT,NH,NY,ME,VA,NC	
Selenium	CT,NH,NY,ME,VA,NC	
Silver	CT,NH,NY,ME,VA,NC	
Thallium	CT,NH,NY,ME,VA,NC	
Vanadium	CT,NH,NY,ME,VA,NC	
Zinc	CT,NH,NY,ME,VA,NC	
SW-846 7471B in Soil		
Mercury	CT,NH,NY,NC,ME,VA	
SW-846 8270D-E in Soil		
Acenaphthene	CT,NY,NH,ME,NC,VA	
Acenaphthylene	CT,NY,NH,ME,NC,VA	
Acetophenone	NY,NH,ME,NC,VA	
Aniline	NY,NH,ME,NC,VA	
Anthracene	CT,NY,NH,ME,NC,VA	
Benzidine	CT,NY,NH,ME,NC,VA	
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA	
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA	
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA	
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA	
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA	
Benzoic Acid	NY,NH,ME,NC,VA	
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA	
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA	
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA	
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA	
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA	
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA	
Carbazole	NC	
4-Chloroaniline	CT,NY,NH,ME,NC,VA	
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA	
2-Chloronaphthalene	CT,NY,NH,NC,VA	
2-Chlorophenol	CT,NY,NH,ME,NC,VA	
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA	
Chrysene	CT,NY,NH,ME,NC,VA	
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA	
Dibenzofuran	CT,NY,NH,ME,NC,VA	
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA	
1,2-Dichlorobenzene	NY,NH,ME,NC,VA	
1,3-Dichlorobenzene	NY,NH,ME,NC,VA	
	·	



## CERTIFICATIONS

## ertified Analyses included in this Report

Analyte	Certifications
SW-846 8270D-E in Soil	
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
1,2-Diphenylhydrazine/Azobenzene	NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
'-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodimethylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachloronitrobenzene	NY,NC
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Phenol	CT,NY,NH,ME,NC,VA
Pyridine	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	CT,NY,NH,ME,NC,VA
1,2,4-Trichlorobenzene	NY,NC CTNVNH ME NC VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC
-846 8270D-E in Water	
Acenaphthene	CT,NY,NC,ME,NH,VA



## CERTIFICATIONS

ertified Analyses included in this Report

Analyte	Certifications
	Certifications
W-846 8270D-E in Water	
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Aniline	CT,NY,NC,ME,VA
Anthracene	CT,NY,NC,ME,NH,VA
Benzidine	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA
Benzoic Acid	NY,NC,ME,NH,VA
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
1,2-Diphenylhydrazine/Azobenzene	NY,NC
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA
Jexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA



## CERTIFICATIONS

rtified Analyses included in this Report

1	
Analyte	Certifications
SW-846 8270D-E in Water	
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA
2-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA
N-Nitrosodimethylamine	CT,NY,NC,ME,NH,VA
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachloronitrobenzene	NC
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
yridine	CT,NY,NC,ME,NH,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2-Fluorophenol	NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2019
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2019
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
.√PA.	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

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JOK INDA

Prepackaged Cooler? Y / N Glassware in freezer? Y / N \*Contest is not responsible for missing samples from prepacked Chain of Custody is a legal document that must be complete and accurate and is used to determine wha analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con Test values your partnership on each project and will try to assist with missing information, but will not I Glassware in the fridge? Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide ' Matrix Codes: GW = Ground Water WW = Waste Water DW = Drinking Water 2 Preservation Codes: Total Number Of Preservation Code Courier Use Only SL = Sludge SOL = Solid O = Other (please define) Thiosulfate
O - Other (please define) Non Soxhlet PCB ONLY coplers Soxhlet N = Nitric Actd M - Methanol BACTERIA Page / of ENCORE GLASS PLASTIC VIALS T = Sodium A = Air 보 possible sample concentration within the Conc H · High; M · Medium; L · Low; C · Clean; U · Please use the following codes to indicate NEW KELKELANDANIKA MARKANIKA MERKANIKAN Chromatogram AIHA-LAP,LLC Code column above: ANALYSIS REQUESTED held accountable. Doc # 381 Rev 2\_06262019 7015 MCP Certification Form Required RCP Certification Form Required MA MCP Required CT RCP Required MA State DW Required WRTA STULZW 71  $\times$ East Longmeadow, MA 01028 ENCORE BACTERIA 39 Spruce Street Field Filtered Field Filtered Lab to Filter Lab to Filter ASUNDQUIST GOW CONSULTANTS, COM MOBRIEN & COW CONSULTANTS, LON PLASTIC School BOTH MBTA GLASS CHAIN OF CUSTODY RECORD VIALS 0 0 0 0 Conc. Code JC http://www.contestlabs.com ğ Municipality Brownfield Due Date: 10-Day 3-Day 4-Day CLP Like Data Pkg Required: comp PFAS 10-Day (std) 44 % to Government 0930 Email To: 200 000 11.24 6830 1030 1200 002 1300 1000 1,00 ormat: Federal Other: '-Day -Day Client Comments: Project Entity Beginning Date/Time 19.19 MIKE OBRIEN レス インチ Email: info@contestlabs.com DRIVE WATICK MA COW CONSUCTANTS UMASS WALTHAM BEAVER ST WALTHAM Clent Sample 10 / Description Phone: 413-525-2332 6+72.11 ate/Time: Fax: 413-525-6405 Date/Time: Date/Time: Date/Time: Sampled By: ALAN SUNDQUIST ALAN SUNDQUIST H8-1 48-5 HB-6 46-10 H8-14 11-8H 118-7 HB-8 HB-1 205 Con-test Con-Test Quote Name/Number: も合う Refinquished by: (signature) lelinquished by: (signature) 03 ろり O S O (eceived by: (signature) Received by: (signature) Con-Test Work Order# Project Location: Project Manager: nvoice Recipient Project Number: Address:

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples\_\_\_\_\_



Doc# 277 Rev 5 2017

	eceipt Checklist -						ny False	
State	ment will be broug	ght to the af	tention of t	he Client -	State True	or False		
Client (DW	ionsultants	<u>.</u>						
Received By		SA	Date	11 22		Time	1600	
How were the samples	In Cooler	T	No Cooler	1	On Ice	T	No Ice	
received?	Direct from Samp	ling	_		Ambient		Melted Ice	
Were samples within		By Gun #	5	P	Actual Tem	p-2.1		
Temperature? 2-6°C	7	By Blank #	<del></del>		Actual Tem			
Was Custody S	eal Intact?	NA	Were	e Samples			NA	
Was COC Relin	quished?	T		Chain Agre			T	
Are there broken/	eaking/loose caps	on any sam		E		•		
Is COC in ink/ Legible?				ples receive		olding time?	<u> </u>	
Did COC include all	Client		Analysis	<u> </u>	•	er Name		
pertinent Information?	Project		ID's _	<u> </u>	Collection	Dates/Times	ST	
Are Sample labels filled Are there Lab to Filters?		<del></del>		Who was	natific 40			
Are there Rushes?	•	<del></del>		Who was				
Are there Short Holds?	•	=		Who was				
s there enough Volume	.?	<del></del>		**************************************	notined:			
s there Headspace whe	-	NYA	M	/IS/MSD?	F			
Proper Media/Container	s Used?	-F-SA	ls	s splitting sa	amples req	uired?	F	
"ere trip blanks receive	-	E '	C	On COC?_	F			
o all samples have the	proper pH?		Acid	IVA		Base	<u>NA</u>	
Viala #	Condimens	# 1			ii.			#
Jnp-	1 Liter Amb.		1 Liter Pl				z Amb.	1(1)
-ICL-	500 mL Amb.		500 mL P	~~~~			nb/Clear	
Meoh- Bisulfate-	250 mL Amb.		250 mL F				nb/Clear	
Ol-	Flashpoint Other Glass		Col./Bac			<del></del>	nb/Clear	
		1	Other Pl	actic		En	core	3
hiosulfate-			Other Plastic I				core	
Chiosulfate- Sulfuric-	SOC Kit Perchlorate		Other Pl Plastic I Ziploc	Bag		En Frozen:	core	
	SOC Kit		Plastic I Ziploc	Bag ck			core	
Sulfuric-	SOC Kit Perchlorate	#	Plastic I	Bag ck			core	e.
Sulfuric-	SOC Kit Perchlorate  Containers Liter Amb.	##	Plastic I Ziploc	Bag ck edia	*	Frozen:	core	<b>#</b>
Gulfuric- Mals J Jnp- ICL-	SOC Kit Perchlorate  Containers  1 Liter Amb. 500 mL Amb.	<b>4</b>	Plastic I Ziploc Unused Ma 1 Liter Pl 500 mL P	Bag ck edia astic	1	Frozen: 16 oz 8oz Arr	2 Amb. nb/Clear	<b>4</b>
Alfuric- Alia Alia Alia Alia Alia Alia Alia Alia	SOC Kit Perchlorate  Containers  1. Liter Amb. 500 mL Amb. 250 mL Amb.	# ·	Plastic I Ziploc Unused Me 1 Liter Pl 500 mL P 250 mL P	Bag ck edia eastic Plastic		Frozen:  16 oz 8oz An 4oz An	z Amb. nb/Clear nb/Clear	#
Alls Sulfuric- Alls Sulfuric- All Sulfuric- Aleoh- Bisulfate-	SOC Kit Perchlorate  Containers  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria		Plastic I Ziploc Unused Me 1 Liter Pl 500 mL P 250 mL P Flashpo	Bag ck edia astic Plastic Plastic coint	***	Frozen:  16 oz 8oz An 4oz An 2oz An	z Amb. nb/Clear nb/Clear nb/Clear	
Mals #.  Jnp- HCL- Meoh- Bisulfate- DJ-	SOC Kit Perchlorate  Sontainers  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic		Plastic I Ziploc Unused Ma 1 Liter Pl 500 mL P 250 mL P Flashpo Other G	Bag ck edia astic clastic clastic oint lass	<b>H</b>	Frozen:  16 oz 8oz An 4oz An 2oz An	z Amb. nb/Clear nb/Clear	
Als # Jnp- HCL- Meoh- Bisulfate- DI- hiosulfate-	SOC Kit Perchlorate  Containers  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic SOC Kit		Plastic I Ziploc Unused Me  1 Liter Pl 500 mL P 250 mL P Flashpo Other Gl Plastic I	Bag ck edia astic elastic elastic oint lass Bag	<b>H</b>	Frozen:  16 oz 8oz An 4oz An 2oz An	z Amb. nb/Clear nb/Clear nb/Clear	4
Mals #.  Jnp- HCL- Meoh- Bisulfate- DJ-	SOC Kit Perchlorate  Sontainers  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic		Plastic I Ziploc Unused Ma 1 Liter Pl 500 mL P 250 mL P Flashpo Other G	Bag ck edia astic elastic elastic oint lass Bag	<b>H</b>	Frozen:  16 oz 8oz An 4oz An 2oz An	z Amb. nb/Clear nb/Clear nb/Clear	
Alis # # Jnp- HCL- Meoh- Disulfate- Di- Hiosulfate- Sulfuric-	SOC Kit Perchlorate  Containers  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic SOC Kit		Plastic I Ziploc Unused Me  1 Liter Pl 500 mL P 250 mL P Flashpo Other Gl Plastic I	Bag ck edia astic elastic elastic oint lass Bag	<b>H</b>	Frozen:  16 oz 8oz An 4oz An 2oz An	z Amb. nb/Clear nb/Clear nb/Clear	
Gulfuric-  Malis Jnp- HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric-	SOC Kit Perchlorate  Containers  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic SOC Kit		Plastic I Ziploc Unused Me  1 Liter Pl 500 mL P 250 mL P Flashpo Other Gl Plastic I	Bag ck edia astic elastic elastic oint lass Bag	<b>H</b>	Frozen:  16 oz 8oz An 4oz An 2oz An	z Amb. nb/Clear nb/Clear nb/Clear	
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Alis # # Jnp- HCL- Meoh- Disulfate- Di- Hiosulfate- Sulfuric-	SOC Kit Perchlorate  Containers  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic SOC Kit		Plastic I Ziploc Unused Me  1 Liter Pl 500 mL P 250 mL P Flashpo Other Gl Plastic I	Bag ck edia astic clastic clastic coint lass Bag	<b>H</b>	Frozen:  16 oz 8oz An 4oz An 2oz An	z Amb. nb/Clear nb/Clear nb/Clear	

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## HAZARDOUS MATERIALS SUMMARY REPORT

225-227 Beaver Street 240 Beaver Street Waltham, Massachusetts

## Prepared for:

City of Waltham 119 School Street Waltham, MA 02451

January 2020

**CDW Project # 1830.10** 



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#### 1.0 INTRODUCTION

CDW Consultants, Inc. (CDW) is pleased to present this report summarizing the findings of the suspect asbestos-containing materials (ACM) and lead-based paint (LBP) inspection of both 240 Beaver Street (Parcel #1) and 225-227 Beaver Street (Parcel #2) properties located in Waltham, Massachusetts. In addition, CDW performed a visual inspection of the Site buildings for the presence of other types of oil and/or hazardous materials, residues and containerized waste.

CDW initially reviewed existing documents summarizing prior building hazardous materials survey of all structures on both properties and performed visual assessment to confirm current conditions and quantities of confirmed ACM, LPB, and other hazardous materials and/or containerized wastes.

CDW reviewed the following reports:

- "Pre-Demolition/Renovation Asbestos Survey 240 Beaver Street, Waltham, MA prepared by ATC Group Services in November of 2016 to confirm the presence of previously documented ACM
- Limited Asbestos and Lead Paint Inspection, Waltham Research Station, Main Barn, Calf Barn, and Garage (2009).
- "Waltham Station-Lead Paint Sampling" (Lead Analysis Results Table) completed by University of Massachusetts Amherst Environmental Health and Safety Department in January of 2018. The report summarizes the results of lead determination sampling completed throughout the Administration Building via X-Ray Fluorescent (XRF) analysis.
- "Waltham Experiment Station" prepared by University of Massachusetts Amherst employees in January 2010 to confirm building materials and square footage of structures presently in a collapsed or deteriorated state.

The afore mentioned documents were used to identify, clarify or confirm the presence of ACM and LBP in building materials during the on-site assessment by CDW in November 2019 and January 2020.

#### 1.0 GENERAL SITE DESCRIPTION

## 2.1 240 Beaver Street Waltham, MA (Parcel 1)

The Parcel 1 section of the property consists of an Administration Building, Grey Workshop Building, Boiler House, Corn Laboratory, Greenhouses, a research area, small community garden plots, and agricultural fields. This parcel is bordered by Beaver Street to the north, a baseball field and Waverly Oaks road to the east and southeast, Marianne Road to the south, and Linden Street Residential Properties at Linen Circle and Floral Circle to the west.

Both the administration building (office space) and several of the functioning greenhouses are occupied by Waltham Fields Community Farm. The UMASS maintenance department also occupies an office in the administration building and uses the basement area of the Gray Building as a workshop and small repairs.



The Parcel is accessible from Beaver Street via three gravel driveways which provide access to parking along the east, west, and south side of the Administration Building and the eastern side of the Gray Workshop Building.

#### ADMINISTRATION BUILDING

The Administration Building is located closest to Beaver Street. The administration Building is a three-story structure and consists of approximately 15,000 gross square feet of finished space. The structure is constructed of a brick and concrete shell with a tar and gravel style roof. The interior finishes consist of masonry concrete block exterior walls and plaster interior walls and ceilings. Vinyl composite floor tile in varying sizes covers the floor on the 1<sup>st</sup> and 2<sup>nd</sup> levels with a painted concrete floor throughout the ground level. This includes the auditorium area which makes up approximately 5,000 square feet and is currently used as storage by the Waltham Fields group. Within the auditorium area is the large duct system which connects to other sections of the building. The building is heated by steam which originates at the natural gas-powered Boiler House and is piped into the building via a tunnel system.

#### **GRAY BUILDING**

The Gray Building is located approximately 100 feet to the east of the administration building closest to Beaver Street. The Gray Building is a two-story structure measuring approximately 3,100 square feet of finished space. The exterior is wood shingled with an asphalt shingled roof. The interior has several varieties of vinyl composite floor tiling, mudded plaster walls and ceilings, wooden doors, door frames, moldings and window casings throughout. The Workshop/Basement area can be accessed by an overhead garage door on the east side. This workshop area serves as maintenance facility for equipment and small engine repairs for the University of Massachusetts Amherst Maintenance staff. It has a concrete floor with drainage and painted CMU block walls. The upper levels have been used mostly as laboratory space for analyzing soils, photography, etc. The state of the building prevented any further investigation of the roof as several areas have been weather or water damaged and is visually evident amongst the upper levels.

#### **BOILER HOUSE**

This approximate 800 square foot building is constructed of concrete and brick veneer. The Boiler House is home to the Natural Gas fired boilers which serve as the heat source for all the buildings on Parcel 1. This boiler produces steam heat which is channeled underground throughout the system via a main steam line connected directly to the Gray Building. The Boiler House also has an attached incinerator room located on the ground level which is connected directly to the chimney (smokestack).

The steam is then forced from the Gray Building and split through the tunnel system between the Greenhouses on to the Corn Lab. The Main Administration Building is serviced by its own dedicated steam pipe which is tunneled directly into the building from the Boiler House.

In the Boiler House, asbestos containing materials have been identified in previous sampling events, both within the chimney/smokestack and the associated breaching (incinerator to chimney) in the form of rope gasket. The chimney itself and associated venting was inaccessible for visual inspection. CDW was not able to ascertain the location of subsurface steam pipes but assumes that any subsurface steam pipes are asbestos wrapped.



CDW did not collect any samples for the presence of ACM in the Boiler Room and used data from previous inspections and sampling events to re-confirm any known or suspected ACM.

#### CORN LAB

Located to the east of the Gray Building, the Corn Laboratory is a one-story brick building measuring approximately 1,700 square feet. It has two (2) Greenhouses (Identified as Greenhouses 5A and 5B) attached to the main Brick Building which was used as an office and laboratory.

Greenhouse 5A is connected to the Corn Lab Building at the first floor and is constructed from a wood purlin framing system. The frame for this structure shows signs of failure that include cracked and sagging wood and rusted and sagging metal supports. Greenhouse 5B is connected to the Corn Lab Building at the basement level with the structure below grade. The roof is a modified glazing system with some wood showing signs of deterioration.

At the time of inspection, the Corn Lab and associated Greenhouses were surrounded by a chain link fence. Due to the deteriorated state of the structure it was determined that it was unsafe to enter the main building or the attached greenhouses. As a result, CDW personnel only performed a visual assessment from the outside and did not collect any samples for ACM or LBP during the hazardous materials survey.

## **2.2 225-227 Beaver Street (Parcel 2)**

Parcel 2 (225-227 Beaver Street) is located on the northern side of Beaver Street and is also referred to as the "Northern Parcel". The property consists 58.74 acres of land and was transferred to the Commonwealth of Massachusetts in March of 1923. From that time, these properties comprise the University of Massachusetts Agricultural College Experiment Station. The parcel is bordered by the Fernald State School property to the north and by Waverly Oaks Road and Beaver Street to the south. Camp Cedar Hill lies to the west, with Waverly Oaks Road to the east.

The access to the property is via a gravel drive with an entrance on Beaver Street. The drive borders Camp Cedar Hill to the West and gradually rises in elevation to meet the group of structures. This area of the property consists of abandoned dairy farm buildings including a Farmhouse (former residence), Main Barn, Calf Barn, an associated garage and foundation structures for former buildings.

These structures are in disrepair and several have completely collapsed. The upland field west of the wetland was used for hay production and grazing. From aerial photographs of the area, the wet meadow and wetland areas were never developed.



## **FARMHOUSE**

The Farmhouse is a two-story, duplex style, wood framed house with wood shingle siding and asphalt tile roof. The structure consists of approximately 5,856 sq./ft of finished space. Each side of the house includes a basement, 1<sup>st</sup> floor, 2<sup>nd</sup> floor and an attic. Hardwood floors run throughout with exception of the kitchen and bathrooms. The kitchen contains a 9" x 9" beige w/grey vinyl floor tile (w/associated mastic), with the bathrooms having a 12 x 12 tan w/pattern vinyl tile. Walls consist of a horse-hair type decorative plaster (some covered by particle board paneling), with wood molding/door frames. The ceilings are wire-mesh/plaster, excluding the 2<sup>nd</sup> Floor bathrooms which are comprised of a white cellulose tile.

The house is split down the middle by a shared brick wall and attached chimneys which run from the basement level to the roof. Each basement (2) has a cement floor and 3 walls made of block/cement with the fourth being the shared brick. During the assessment two (2) 275-gallon heating oil tanks were discovered (one in each side), it is estimated that they together contain approximately 50 total gallons of petroleum. Several water-heater tanks and HVAC system components were discovered in both sides of the basement during the time of inspection. Mold was present throughout the 2<sup>nd</sup> floor of the farmhouse, possibly due to water damage from a leak in the roof and damaged skylights.

#### <u>MAIN BARN</u>

From the visible material within the approximate 3,000 sq./ft footprint area of the collapsed structure it is assumed that the stable style building was constructed of wooden post and beam with panel siding and an asphalt shingle roof. The area surrounding the Main Barn was secured with a locked chain link fence due to the collapse of the building. The building appeared unsafe at the time of the site visit. No entry was made beyond the fence line. No oil or hazardous materials storage containers were observed through the fence. In previously published documentation, ACM was confirmed within the structure in the form of transite paneling and asphalt roofing shingles; however, no quantity had been established.

## CALF BARN

The Calf Barn is a one-story wood-built structure with a loft and a transite shingle roof. The structure is collapsed and inaccessible due to a chain link fence. From a visual assessment the "Calf Barn" is an approximate 2,000 sq./ft building space, constructed of wooden post and beam with wooden panels and a gray square transite tile roof. CDW collected a sample of the corrugated roof tile which was stored inside the Calf Barn and which did not appear to be sampled during previous events.

## **GARAGE**

The Garage structure is an approximately 700 sq./ft building located to the northeast of the Farmhouse. It is constructed on a concrete slab and consists of wooden post and beam with wood panel siding, an asphalt shingle roof and associated vapor barrier paper. During the assessment it was observed that the roof is mostly collapsed and it is surrounded by a chain link fence. It was observed from the exterior that a significant size pile of used rubber tires, small piles of stored/unused asphalt shingles and miscellaneous building materials including scrap metals were stored and left behind within the building and will need to be disposed of.



#### 3.0 ASBESTOS SURVEY

#### 3.1 Methods

The USEPA and Massachusetts Department of Environmental Protection (MassDEP) are responsible for developing and enforcing regulations necessary to protect the general public from airborne contaminants that are known to be hazardous to human health. They regulate ACM associated with renovation, demolition, and asbestos abatement projects via the National Emissions Standard for Hazardous Air Pollutants (NESHAP) Title 40 CFR Part 61 regulation. These regulations require that buildings be inspected for ACM prior to renovation/demolition projects. They stipulate that all friable ACM as well as non-friable ACM that are in poor condition or will be made friable by renovation or demolition activity be removed or otherwise appropriately abated before they are disturbed.

In November 2019, Mr. Alan Sundquist (Massachusetts DLS Inspector #AI900788) conducted an inspection for suspect ACM. An inspection is required by the United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP), prior to scheduled building renovations. Samples of suspect materials were collected to confirm the presence or absence of ACM. Suspect materials were grouped into homogenous areas. A homogenous area is an area that is similar in color, texture and date of application. Hand tools were used to collect bulk samples which were promptly placed in sealed plastic bags using a unique numbering system. Samples were not collected of non-suspect materials, including wood, fiberglass, plastic/vinyl, ceramic, concrete, neoprene/rubber, glass, and carpeting.

The investigative work for the asbestos survey included conducting a visual inspection of physically accessible areas of the structure, reviewing plans and observe any vapor barriers, as well as the roof for suspect materials. Once the inspection was completed, the building components were categorized into homogeneous areas. These homogeneous areas included: surfacing materials, thermal system insulation, and miscellaneous materials. CDW collected bulk samples of different homogeneous suspect materials for asbestos analysis. The bulk samples were delivered under chain of custody to Asbestos Identification Laboratory, Inc. (AIL) of Woburn, Massachusetts, fully accredited asbestos analytical laboratories, analyzed the bulk samples utilizing Polarized Light Microscopy (PLM) in accordance with the requirements of 40 CFR Part 763, Subpart F. Samples analyzed to contain greater than 1% asbestos are to be treated as ACM as defined by the USEPA and MassDEP. A positive stop method was used – if one sample in a homogeneous group is positive then additional samples of the same material are not analyzed. The asbestos analytical reports are provided in Appendix A.

Previous inspection reports, documentation and analytical data were carefully reviewed to determine previously documented suspect and confirmed ACM. On November 20<sup>th</sup>, 2019 Mr. Alan Sundquist (Massachusetts Asbestos Inspector #AI 900788) conducted and onsite inspection for suspect materials.



## 3.2 Findings

CDW compiled the results of the recent field survey as a supplement to the information available from prior investigations.

## PARCEL #1

Results of the Parcel #1 laboratory sampling performed by CDW are summarized in the next table:

Field ID / Laboratory ID	Description	Location	Result			
A	ADMINISTRATION BUILDING					
1A,1B, 1C		Behind Brick Facade-				
549748, 549749, 549750	Grey Fire Mortar	Administration Building	ND			
	GREY BUILDING					
11A, 11B, 11C	12"x12" White Tile	Grey Building-Large	ND			
538921, 538922, 538923	w/Grey	Room	110			
12A, 12B, 12C	Tan Mastic	Grey Building- Large	ND			
583924, 583925, 583926	Tan Mastic	Room	ND			
13A, 13B, 13C	White Cailing Plaster	Grey Building-Large	ND			
538927, 538928, 538929	White Ceiling Plaster	Room	ND			
14A	9"x9" Maroon/Black	Grey Building- Room	ND			
538930	Tile	105	ND			
15A	Black Vapor Paper	Grey Building- Room				
538931	(under 9x9 maroon/black tile)	105	ND			
16A	9"x9" Black Floor Tile	Grey Building-Room	ND			
538932	9 x9 Black Floor Tile	105	ND			
17A	Black Vapor Paper	Grey Building- Room				
538933	(under 9"x9" black floor tile)	105	ND			

A summary of the **CONFIRMED** positive for ACM findings sampling events performed by **ATC** (formerly ECS) are presented by building in the tables below:

Material Description	Location	Est. Quantity	Units
ADMIN	ISTRATION BUILDING		
Pipe Fittings and Thermal Surface Insulation	On Steam and Hot Water Lines and Valves Throughout the Administration Building	2,567	LF
Black Soundboard Adhesive	Room 09A (Patch) and Room 202	40	SF



Brown Stick Pin Adhesive on Metal  Ductwork	Auditorium, Room 019	200	SF
Residual Black Mastic	Room 03 Administration Building	100	EA
Residual Acoustical Ceiling Plaster (Blue and White) Left after Abatement was Completed	Room 019 Perimeter	10	LF
Gray with specks 9" x 9" Floor Tile and Associated Mastic	Room(s) 10, 12, 16, 101, 104, 119, 207, 207, 206, 212, 213,214	2,325	SF
Cream with Gray and Black Specks 12 x 12 Floor Tile and Associated Mastic	Hallway 099E and Room 19	3,548	SF
Brown 9" x 9" Floor Tile and Associated Mastic	Room 09 and 09A	200	SF
Brown 12" 12" Floor Tile and Associated Mastic	Hallway 099C and Hallway 099D	128	SF
Black with White Specks 12' x 12" Floor Tile and Associated Mastic	Hallway 199B	340	SF
Brown 9" x 9" Floor Tile and Associated Mastic	Room 102, 105, 108, 108A, 110, 112, 112A, 117, 118, 120, 121, 122, 124, Hallway 199D, 201, 202, 203, 204, 209, 210 Hallway 299B and 299C	3,911	SF
9"x 9" Floor Tiles and associated Mastic	Throughout, Halls Outside Auditorium and select offices on all levels	108,000	SF
Exterior Window Caulk	At Sides of Long Window Banks, Between Bank and Brick	115	LF
Exterior Window Glaze	Interior of Exterior Window Banks Throughout	115	EA
Square Pattern Linoleum on Counter	Room 101	30	LF
Transite Counter Tops, Sink Counter Tops and Stored Transite	Room 11, 214, 109 205	90	SF

SF=Square Feet LF =Linear Feet EA= Each

Material Description	Location	Est. Quantity	Units
G.	RAY BUILDING		
Gray with white Specks 9"x9" Floor Tile Associated Vapor Barrier and Associated Mastic	Room 105,202, 202A, 203, 203A, 204, 204A, 221, 221A, 1st Floor Hallway, 1st Floor Bathroom, 1st Floor Storage, 2nd Floor Hall, Small Room 2nd Floor Hallway	2,285	SF



Green/Blue Transite Boards	Room 105, 201, 203, 204	91	SF
	Basement Stairs to Sub-Basement		
Fume Hood Counter	Room 204	10	SF
Laboratory/Sink Countertops	1st Floor Large Room, Room 201, 204	27	SF
White Sink Undercoating	Room 105	10	EA
Thermal Systems Insulation	Sub-Basement Pipe Chase into Greenhouse	~ 200	LF
Window Glazing Compound	Throughout	60	EA
Window Casing Caulking	Garage Exterior	6	EA
Black with White Streaks Countertop Sheet Goods	Room 105, Room 204	50	SF
(!)Decorative Plaster Skim	1st Floor Large, Storage Room, Room 203,204	1,200	SF
(!)Cementous Coating Over Cork	Sub-Basement Cooler	550	SF
Brown Faux Tile Adhesive Behind Splash Guard	Basement	10	SF

SF=Square Feet LF =Linear Feet EA= Each (!)=Lab Data Indicates <1% Asbestos

Material Description	Location	Est. Quantity	Units
GR	<u>EENHOUSES</u>		
Thermal Systems Insulation	(Trenches)Greenhouse 3, 4, 5A, 5B, 6, 7, 8, 14	340	LF
Corrugated Transite Wall Panel Including Green/Blue Transite Board	Greenhouse 2, 9, 10, 11, 13	659	SF
Window Glazing Compound	Greenhouse 1-15	16,000	SF
Caulking	Between Small Shed and Greenhouse	100	SF
Black Panel Adhesive	Greenhouse 6	110	SF
Yellow Foam Insulation Adhesive	Greenhouse 13, 14, 15	460	SF
Sink Undercoat	Exterior Between Greenhouse 8 and 15	5	SF

SF=Square Feet LF =Linear Feet EA= Each



Material Description	Location	Est. Quantity	Units
	CORN LAB		
Gray with White Streaks9" x 9" Floor Tile and Associated Mastic	Main Room, Entry and Bathroom	270	SF
(?)Stored Transite Board (Presumed)	Basement	2	SF
(?)Stored Corrugated Transite Panels	Exterior of Greenhouse	30	SF
Door Casing Caulking	Front Door and Door Leading to Greenhouse	2	EA
Gray Sink Undercoating	Main Room	1	EA
(?)Window Glazing Compound	Corn Lab Greenhouse	760	LF

SF=Square Feet LF =Linear Feet EA= Each (?)= Presumed to be Asbestos Containing

Material Description	Location	Est. Quantity	Units
PES	STICIDE SHED	l	I
Window Glazing Compound	Throughout	546	LF

LF=Linear Feet

Material Description	Location	Est. Quantity	Units
B0	ILER HOUSE		
Door Casing Caulking	Throughout	2	EA
Exterior Window Casing and Glazing Compound	Throughout	7	EA
TSI Roping around Metal Breeching (Smokestack Exterior)	Exterior of Building	20	LF
Gaskets Associated with Steel Boiler Breeching	Boiler Room	50	LF
Insulation between steel walls of incinerator and suspect components	Incinerator Room	190	SF
(?)Stored Boxes of Floor Tiles	Sub-Basement Pipe Chase into Greenhouse	2	Boxes

SF=Square Feet LF =Linear Feet EA= Each (?)= Presumed to be Asbestos Containing



## PARCEL #2

Results of the Parcel #2 laboratory sampling performed by CDW are summarized in the below table:

Field ID / Laboratory ID	Description	Location	Result
	FARMHOUSE		
1A, 1B, 1C 538895, 538897, 538897	Sheet Rock w/Paint	2 <sup>nd</sup> Floor Left	ND
2A, 2B, 2C	9 x 9 Beige w/Grey	Kitchen	ND
538898, 538899, 538900	Floor Tile		:
3A, 3B, 3C	Brown Mastic	Kitchen	ND
538901, 539902, 538903	_ Brown Mastic	Kitchen	ND
4A	DI. J. D. J.	D	NID
538904	Black Paint	Basement Wall	ND
5A, 5B, 5C			
538905, 538906, 538907	Ceiling Plaster	1 <sup>st</sup> Floor Bedrooms	ND
6A, 6B, 6C			) III
538908, 538909, 538910	Ceiling Plaster – White	Kitchen	ND
7A, 7B, 7C	G III DI L	T7'. 1	ND
538911, 538912, 538913	Ceiling Plaster- Brown	Kitchen	ND
8A, 8B, 8C			
538914, 538915, 538916	White Ceiling Tile	2 <sup>nd</sup> Floor Bath	ND
9A			
538917	Tan Floor Tile	2 <sup>nd</sup> Floor Bath	ND
23871/	GALEDADET		
	CALF BARN		750
10A, 10B, 10C	Grey Corrugated Roof	Calf Barn Roof	Detected Chrysotile
538918, 538919, 538920	Tile/Paneling	2 2 2.00	20%

SF= Square feet



The confirmed ACM location and quantity from the survey completed in November 2019 is presented below:

Confirmed ACM Materials				
Material Description	Sample Location	Est. Approximate. Quantity	Units	
Grey Corrugated Roof Tile/Paneling	Calf Barn (stacked inside)	1,000	SF	

SF= Square feet

A summary of the confirmed positive for ACM findings and quantities performed by ATC (formerly ECS) are presented in the below table:

Material Description	Material Description Location		Units
I	FARMHOUSE		
Linoleum Flooring	Pantry/Kitchen Area	1,200	SF
	MAIN BARN		
Transite Paneling	Throughout	Unknown	SF
Asphalt Roof Shingles	Exterior of Building	Unknown	SF
	CALF BARN		
Square Transite Roof Shingles	Exterior	5,000	SF

<sup>\*</sup> CDW estimated quantity based on visual assessment and available data
SE= Square feet

Tables including all suspect materials which were analyzed and were found not to contain asbestos can be found within the ATC Inspection report in Appendix C.

### 3.3 Other Observations

Other observations during CDW's survey include:

Due to the current state of the Main Barn, Calf Barn and the Garage Building it is possible that
additional suspect materials may be uncovered throughout the course of performing work or
disposal activities.



- No samples of the roof were collected from the administration building due to limited scope therefore it should be assumed ACM until which time definitive sampling can be completed.
- Both the "Waltham Experiment Report" (produced by UMASS in 2010) and the Inspection report published by Environmental Compliance Services (ECS) in 2009 eludes to the confirmed presence of asbestos being found within the Farmhouse in the form of a Linoleum floor. It also mentions ACM containing transite panels and asphalt roof shingles associated with the Main Barn structure, though no quantities were given.
- Since only limited destructive sampling was performed CDW also believes that ACM could also be present in an underlying floor leveler or "Levelastic" which could be present beneath both flooring and mastic within several of the structures.
- CDW was not able to inspect foundation for coating "mastic" due to inaccessibility to the subsurface.
- The brick within the incinerator structure is assumed to be "fire brick" and likely to be ACM. The collected ash residue should also be considered hazardous.

A summary of the assumed positive ACM is presented in the table below:

Material Description (Assumed)	Location	Est. Quantity	Units
Roofing Material	Administration Building	15,000	SF
Incinerator Brick	Boiler House	Unknown	SF
Ash Residue (associated waste from incinerator)	Boiler House (Incinerator)	3	Tons

SF= Square feet

#### 3.4 Recommendations

CDW has confirmed the presence or likely presence of ACM within buildings at the Site and has developed preliminary quantities for abatement.

Since many of the structures were collapsed or deemed unsafe to enter during CDW's time onsite it is recommended that selective demolition and segregation of building materials take place before any type of disposal. Given the state of the structures it is difficult to estimate a quantity of the materials before work to segregate all other building materials takes place.

CDW recommends that a selective demolition and abatement plan or possible "non-traditional workplan" be created for abatement of asbestos. This calculated process would allow for a more efficient disposal process and avoid unnecessary expenses. Such expenses could occur due to the cross contamination of construction waste and subsequent fees associated with disposal. A "non-traditional work plan" would most likely focus on the more deteriorated structures on the property such as the



Greenhouses or Corn Lab Building. Performing work under a MassDEP approved workplan would allow for the segregation of positively identified hazardous materials and allow the possibility to dispose of them separately as an alternative to disposing of the entire structure as hazardous material.

ACM that will be impacted by renovation or demolition work must be removed before they are disturbed. This work must be conducted in accordance with a project design as prepared by a licensed Asbestos Abatement Project Designer. This report is not intended for use as an abatement design. Prior to disturbance, the ACM identified must be abated by a Commonwealth of Massachusetts-licensed asbestos abatement contractor following all federal, state & local regulations governing asbestos abatement. A copy of the Asbestos Waste Shipment record must be received within 30 days of removal from the Site. Asbestos air quality sampling must be conducted under USEPA regulations following asbestos abatement and prior to re-occupancy of the spaces.

During the course of renovation or demolition work, it is possible that additional suspect ACM will be encountered. Contractors should be apprised to conduct any such work in a controlled manner. If suspect materials that have not been sampled are encountered, they should be assumed to contain asbestos, unless appropriate sampling and analysis indicates otherwise.

If any identified ACM will remain in place, then the ACM should be managed under an Operations and Maintenance Plan (O&M Plan) so that they are not inadvertently disturbed. The O&M Plan would include establishing a Program Manager, recordkeeping, employee and contractor notifications, periodic surveillance and training requirements.

#### 4.0 LEAD-BASED PAINT

#### 4.1 Methods

CDW performed a visual inspection of painted surfaces. CDW collected samples of paints on various types of building component substrates. Samples were submitted to Pro-Science Laboratories in Woburn, Massachusetts for analysis via atomic absorption spectrometry (AAS). The lead paint analytical reports are provided in Appendix B.

## 4.2 Findings

In November 2019, CDW collected select samples of paint to determine the potential presence of lead. The results of the laboratory analysis are provided in the below table:

Sample ID/ Lab ID	Substrate	Location	Lead Concentration (% Weight)
LP-1	Black Paint	Farmhouse Basement Wall	<rl< td=""></rl<>
C 638190	Black I aim	1 anniouse Busement wan	



Sample ID/ Lab ID	Substrate	Location	Lead Concentration (% Weight)
LP-2	White Paint on Molding	1st Elean Farmshauga	0.27
C 638191	and Stairs	1 <sup>st</sup> Floor Farmhouse	0.27
LP-3	White Ceiling Paint	Grey Building/Large	<rl< td=""></rl<>
C 638192	winte Cennig 1 ann	Room	100
LP-4	White Paint on Walls	Grey Building/Large	<rl< td=""></rl<>
C 638193	white Paint on Walls	Room	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
LP-5	Blue Paint on Walls and	Cray Duilding Doom 202	0.32
C 638194	Door	Grey Building Room 203	0.32
LP-6	Gray Paint on Door and	C D 11 D 204	0.26
C 638195	Molding	Grey Building Room 204	0.26
LP-7	Black Paint on Molding	Grey Building 2 <sup>nd</sup> Floor	0.060
C 638196	and Stairs	Hallway	0.069

The analytical results from the limited survey conducted by CDW detected concentrations of lead in three (3) of the seven (7) samples collected. The USEPA defines LBP as any paint or surface coating that contains lead equal to exceeding one milligram per square centimeter (1.0 mg/cm2) or 0.5% by weight. The OSHA lead-in-construction standard defines lead containing paint (LCP) as a paint or coating containing any detectable level of lead.

A previous Lead-Based Paint sampling event was conducted by ECS on August 10<sup>th</sup>, 2009. This survey took place before some or most of the structures had completely collapsed and therefore were more accessible for collection.

Below are the results from the August 10<sup>th</sup>, 2009 lead paint inspection event:

Sample ID (Lab ID)	Description	Location	Lead Concentration (% Weight)
W-1	White Paint on Wood Trim	Garage	6.84
C 341029	Around Doors and Windows		
W-2		Main Barn	25.79



Sample ID (Lab ID)	Description	Location	Lead Concentration (% Weight)
C 341030	White/Tan Large Door Frame Paint		
W-3 C 341031	Green Entrance Door Paint	Main Barn	10.24
W-4 C 341032	Green Window/Door Frame Paint	Calf Barn	23.93
W-5 C 341033	White Interior Window Frame Trim Paint	Calf Barn	0.22
W-6 C 341034	Orange Entrance Door Paint	Calf Barn	0.02
W-7 C 341035	Brown Interior Window Frame Trim Paint	Calf Barn	0.57
W-8 C 341036	White Interior Wall Paint	Calf Barn	32.15
W-9 C 341037	White Trim Paint on Basement Door Frame	Main Barn	36.24
W-10 C 341038	Brown Exterior Siding Shingles	Main Barn	0.07

Six (6) of the ten (10) samples for Lead Based Paint were observed and tested for concentration greater than one milligram per square centimeter (1.0 mg/cm2) or 0.5% by weight.

The results of the 2009 Lead Paint survey by ECS can be found in Appendix D. This testing was done via the XRF method which can be known to emit false positives during field testing. CDW would recommend that before any large-scale demolition or construction, any areas above the action level (1.0 mg/cm2) be resampled and submitted to a lab for analysis via atomic absorption spectrometry (AAS) method.

#### 4.3 Recommendations

Based on the conclusions of this testing, the following recommendations are offered:

- Removal of the LBP is not required. However, in accordance with the EPA Lead Renovation, Repair, and Painting (RRP) Rule 40 CFR 745, workers, students, visitors and the public must be protected from lead dust generated during the demolition of LBP or LCP coated surfaces.
- Components identified to contain the presence of lead should not be disturbed in an uncontrolled manner. Disturbance of these materials should only be done by properly trained



personnel in a controlled and documented manner to allow for the safety of the workers, bystanders and proper disposal of waste materials.

## 5.0 OTHER HAZARDOUS MATERIALS (OHM) SURVEY

## 5.1 Methods

CDW visually inspected the Site building for universal, special and hazardous wastes associated with building materials. The survey was intended to identify and quantify materials such as: mercury-containing light tubes, PCB-containing light ballasts, mercury containing thermostats and switches, lead and tritium batteries, refrigerants and other hazardous materials. No hazardous materials sampling or analysis was conducted as part of this survey.

## 5.2 Findings

The OHM identified were as follows:

Material Description	Location	Est. Quantity	Units
ADMINIS	TRATION BUILDING		
Compact Incandescent Bulbs	Throughout	36	EA
Fluorescent Bulbs (Mercury) and LED Bulbs (Arsenic and Lead)	Throughout	357	Bulbs
Electronic Light Ballast	Throughout	159	Each
Thermostats and Switches (Mercury)	Throughout, Mechanical and HVAC	2	Ampules
Emergency Light Batteries (Lead)	Throughout	ND	EA
Fire Extinguishers (Compressed Gas)	Throughout	3	EA
Exit Signs (Tritium)	Throughout	6	EA
Older Door Retractors (Hydraulic Fluid)	Doors	6	EA
Heat Detectors (mercury)	Throughout	ND	EA



Material Description	Location	Est. Quantity	Units
GK	RAY BUILDING		
Compact Incandescent Bulbs	Throughout	14	EA
Fluorescent Bulbs (Mercury) and LED Bulbs (Arsenic and Lead)	Throughout	109	Bulbs
Electronic Light Ballast	Throughout	55	Each
Thermostats and Switches (Mercury)	Throughout, Mechanical and HVAC	1	Ampules
Emergency Light Batteries (Lead)	Throughout	_	EA
Refrigerants Associated with HVAC	Throughout	-	Gallons
Fire Extinguishers (Compressed Gas)	Throughout	1	EA
Refrigerants Associated with Water Bubblers	Throughout	-	Gallons
Exit Signs (Tritium)	Throughout	-	EA
Heat Detectors (mercury)	Throughout	-	EA
Asbestos Blanket	Throughout	2	EA
BO	OILER HOUSE		
Ash (associated with incinerator)	Incinerator	3	Tons
F	<i>ARMHOUSE</i>		
Above Ground Storage Tank	Basement	2	275 Gallons
Heating oil	Basement	50(total)	Gallons

## 5.3 Other Observations

Access was limited in areas and buildings considered unsafe. It is possible that via further inspection of collapsed buildings additional hazardous materials will be discovered.

During visual inspection within the Gray building CDW came across multiple chemicals that
are used during the development process of photos. Since no sampling of this media was
performed it should be assumed hazardous until the point when additional sampling can be



performed to determine otherwise. Many of the chemicals used during this process can be harmful and highly toxic via skin contact, inhalation or ingestion.

 Any other miscellaneous materials found stored within the structures should be disposed of as Universal Waste where applicable.

#### 5.4 Recommendations

The OHM identified were as follows:

Items listed in the OHM table, if no longer in use, should be recycled or disposed of in accordance with state and federal regulations.

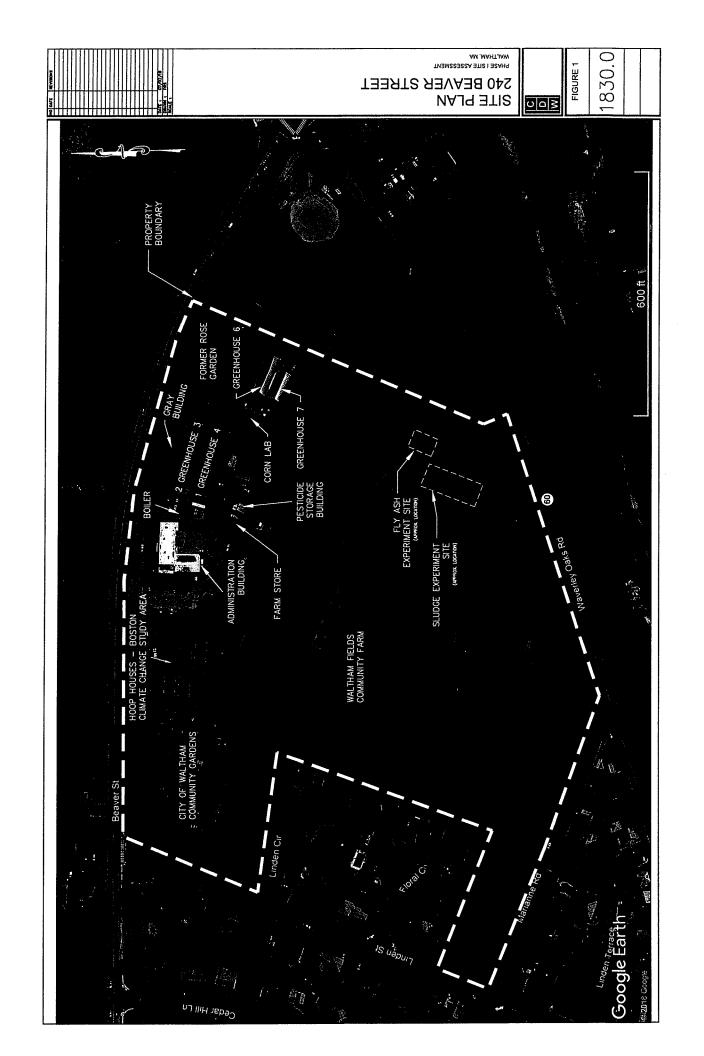
#### 6.0 LIMITATIONS

The conclusions are limited to the information available at the time of the field survey and the scope of services, as defined. No subsurface soil or groundwater sampling and analysis was performed under this task. Where access to portions of the Site or to structures on the site was unavailable or limited, CDW renders no opinion as to the presence of hazardous material or the presence of indirect evidence related to hazardous material in that portion of the site or structure. This report cannot be solely relied upon for renovation or demolition. The sampling performed forms the basis for conclusions expressed and areas inaccessible for testing limits those conclusions. No other conclusions, interpretations or recommendations are contained or implied in this report other than those expressed. While CDW followed industry standards during the inspection, we do not warrant that all suspect hazardous building materials were identified in or on the buildings and shall not be held liable related to future abatement costs related to hazardous materials that are either not discovered or not appropriately characterized. This is due in part to inherent problems with every building inspection, such as, but not limited to:

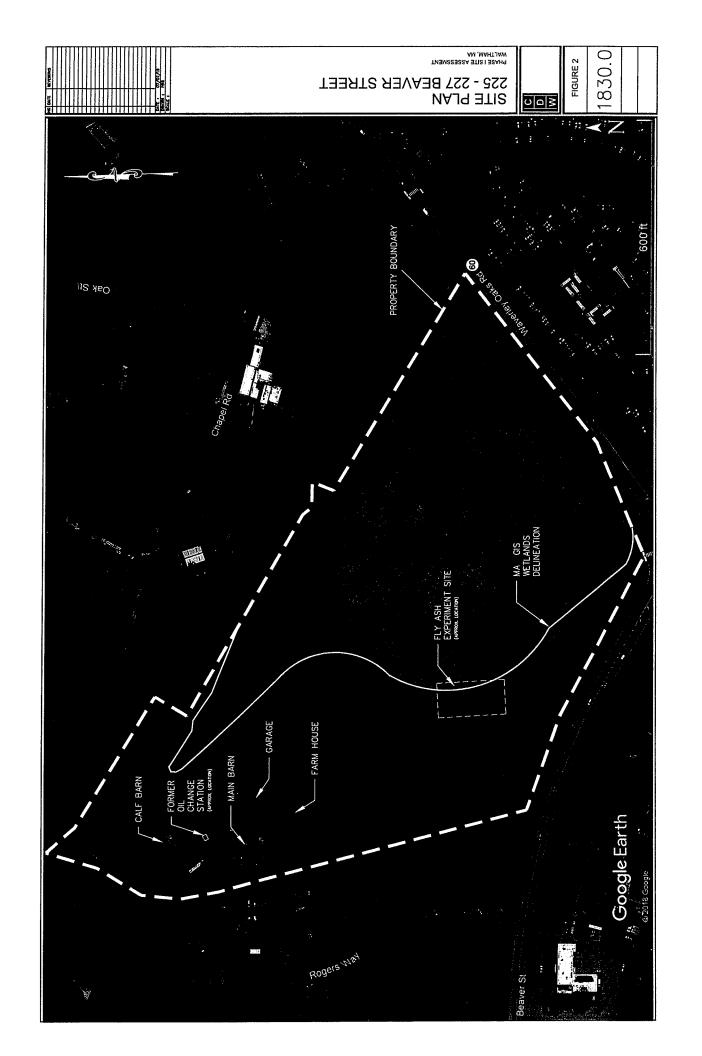
- Seemingly homogeneous materials that are not in fact homogeneous;
- Seemingly representative locations that are not in fact representative;
- Layered materials that are not uniformly present or are isolated;
- Materials that are present and accessible but were not considered to be hazardous,
- Materials that are present in an isolated and limited quantity; and
- Material that is present in locations that are unsafe or otherwise difficult to access.

Client acknowledges that CDW's inspection is limited and all hazardous materials may only become apparent during future demolition. Additional hazardous materials or materials suspected of being hazardous should be assumed to be hazardous unless appropriate evaluation or sampling and analysis demonstrate otherwise. No other use of this report is warranted without the written consent of CDW Consultants, Inc.

# FIGURE 1







APPENDIX A



Alan Sundquist

6 Huron Drive

Natick, MA 01760

CDW Consultants, Inc.

## **Asbestos Identification Laboratory**

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com
Email: mikemanning@asbestosidentificationlab.com

Batch:

48695



Lab Code: 200919-0

December 02, 2019

Project Name:

225 Beaver St

**Project Number:** 

1830.10

Date Sampled:

2019-11-20

Work Received:

2019-11-25

Work Analyzed:

2019-12-02

**Analysis Method:** 

BULK PLM ANALYSIS EPA/600/R-93/116

Dear Alan Sundquist,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- · Massachusetts Certification License: AA000208
- · State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Alan Sundquist for your business.

Michael Thuming

Michael Manning Owner/Director

## December 02, 2019

Alan Sundquist CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 Project Name: 225 Beaver St

Project Number: 1830.10

Date Sampled: 2019-11-20

**Date Sampled:** 2019-11-20 **Work Received:** 2019-11-25

Work Analyzed: 2019-12-02

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
<b>LabiD</b> 1A	Sheetrock W/Paint	2nd Floor Left	multi	Hair 10	None Detected
	- Sheetrock W/Faint	Zild Floor Leit	IIIaa	Non-Fibrous 90	
538895					
1B	Sheetrock W/Paint	2nd Floor Left	multi	l l	None Detected
538896				Non-Fibrous 90	
1C	Sheetrock W/Paint	2nd Floor Left	multi	Hair 10	None Detected
				Non-Fibrous 90	1
538897					
2A	9x9 Beige W/Grey Floor	Kitchen	tan	Other 10 Non-Fibrous 90	None Detected
538898	Tile			Non-Fibrous 90	
2B	9x9 Beige W/Grey Floor	Kitchen	tan	Other 10	None Detected
	Tile			Non-Fibrous 90	1
538899	0.0 D.: W/O Fl		4	0-1 1/	) NI D-+
2C	9x9 Beige W/Grey Floor Tile	Kitchen	tan	Other 10 Non-Fibrous 90	None Detected
538900					
3A	Brown Mastic	Kitchen	brown	Cellulose 10	None Detected
500001				Non-Fibrous 90	1
538901 <b>3B</b>	Brown Mastic	Kitchen	brown	Cellulose 10	None Detected
	— Brown Wastie	Kitonon	J. C.	Non-Fibrous 90	
538902					
3C	Brown Mastic	Kitchen	brown	<b>\$</b>	None Detected
538903				Non-Fibrous 90	
4A	Black Paint	Basement Wall	black	Non-Fibrous 100	None Detected
538904				0.11.1	
5A	Ceiling Plaster	1st Floor Bedrooms	multi	Cellulose 20 Non-Fibrous 80	None Detected
538905				1,011 1221000 00	
5B	Ceiling Plaster	1st Floor Bedrooms	multi		None Detected
				Non-Fibrous 80	)
538906 5 <b>C</b>	Ceiling Plaster	1st Floor Bedrooms	multi	Cellulose 20	None Detected
	— Joenniy Flaster	13t 1 1001 Deditoonis	India	Non-Fibrous 80	ľ
538907					
6A	Ceiling Plaster White	Kitchen	white	Non-Fibrous 100	None Detected
F22200					
538908					1

Field	diD	Material	Location	Color	Non-Asbestos %	Asbestos %
	LabID					
6B	Lunio	Ceiling Plaster White	Kitchen	white	Non-Fibrous 1	00 None Detected
6C	538909	Ceiling Plaster White	Kitchen	white	Non-Fibrous 1	00 None Detected
		_				
7A	538910	Ceiling Plaster, Brown	Kitchen	brown	Non-Fibrous 1	00 None Detected
	538911					
7B		Ceiling Plaster, Brown	Kitchen	brown	Non-Fibrous 1	00 None Detected
	538912					
7C		Ceiling Plaster, Brown	Kitchen	brown	Non-Fibrous 1	00 None Detected
8A	538913	White Ceiling Tile	2nd Floor Bath	tan	Cellulose	90 None Detected
					Non-Fibrous	10
8B	538914	White Ceiling Tile	2nd Floor Bath	tan	Cellulose Non-Fibrous	90 None Detected
	538915					
8C		White Ceiling Tile	2nd Floor Bath	tan	Cellulose Non-Fibrous	90 None Detected 10
9A	538916	Tan Floor Tile		gray	Non-Fibrous 1	00 None Detected
	538917					
10A	330717	Grey Corragated Roof Tile	Calf Barn	gray	Other Non-Fibrous	10 Detected 70 Chrysotile 20
	538918					
10B		Grey Corragated Roof Tile	Calf Barn	green		Not Analyzed
10C	538919	Grey Corragated Roof Tile	Calf Barn			Not Analyzed
	538920					<u> </u>
11A	336920	12x12 White W/Grey Tile	Large Room	white	Non-Fibrous 1	00 None Detected
	538921					
11B		12x12 White W/Grey Tile	Large Room	white	Non-Fibrous 1	00 None Detected
	538922					
11C		12x12 White W/Grey Tile	Large Room	white	Non-Fibrous 1	00 None Detected
	538923					
12A		Tan Mastic	Large Room	tan	Cellulose Non-Fibrous	10 None Detected 90
12B	538924	Tan Mastic	Large Room	tan	Cellulose	10 None Detected
	E20025	-			Non-Fibrous	90
12C	538925	Tan Mastic	Large Room	tan	Cellulose Non-Fibrous	10 None Detected
	538926				MOH-FIDIOUS	<i>3</i> 0
Mono	day 02 Dece	ember	<u> </u>			Page 2 of 3

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
13A	White Ceiling Plaster	Larger Room	white	Non-Fibrous 100	None Detected
538927					
13B	White Ceiling Plaster	Large Room	white	Non-Fibrous 100	None Detected
538928					
13C	White Ceiling Plaster	Large Room	white	Non-Fibrous 100	None Detected
538929					
14A	9x9 Maroon/Black Tile	105	multi		None Detected
538930			ļ.	Non-Fibrous 60	
15A	Vapor Paper	105	multi	Cellulose 70	None Detected
538931				Non-Fibrous 30	)
16A	9x9 Black Floor Tile	105	black	Cellulose 40	None Detected
5.000				Non-Fibrous 60	
538932 17A	Vapor Paper	105	multi	Cellulose 70	None Detected
117	vapor raper	103	litiditi	Non-Fibrous 30	1
538933					<u> </u>
			l		Not Analyzed
538934					

Monday 02 December

Analyzed by:

End of Report

Batch: 48695

Page 3 of 3

Address: 6 5,6886 Lab ID# 10 76 # of Samples Received: Received by/date: \_\_ Relinquish by/date: Contact: 4 LAN SUNDAYST Phone / email address: A suroculs C conconsucing Client: \_ 508 8752657. MOBRION C (Lab Use Only) Reference) Field ID/ (Client CON CONSULTANTS BEAVER ST HURON DRIVE Material Location Material Material Location Temp in Celsius = 23 Material / Location とのもと W/PAINT 830.10 120 DATICALA G % of Asbestos Stereo Scope Color Suite 227 BATCH# Date Sampled: //- 20 www.asbestosidentificationlab.com (781)932-9600 Woburn, MA 01801 165 New Boston St. Homogeneity Q **Texture** Asbestos Identification Lab Friable Chrysotile 36984 Chrysotile Amosite Minerals Tremolite Crocidollte Actinolite Crocidolite Anthophyllite Anthophyllite Tremolite CHAIN OF CUSTODY Actinolite Amosite Actinolite Crocidolite Amosite Chrysotile Anthophyllite Tremolite Asbestos EPA/600/R-93/116 Asbestos % 11-21-19 Morphology **Optical Properties** Extinction Rev 06/16 Sign of Elongation Birefringence Pleochroism Date: Anayzed By: Notify Method: Mail/E-Mail/Verbal Stop on 1st Positive? Turnaround Time MTwo Day 3day 꼰 Next Day Same Day Less 3 Hrs Non-Asbestos Percentage (%) Page \_ Fiberglass Mineral Wool Cellulose Sample Method 9 E  $\mathcal{Z}$ 0 0 (> Hair Zieuk Ming Soi Wipe Point Count Synthetic Other 3 6 Non-Fibrous

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76	2	60	68	64	Field ID/ (Client Reference)
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## **Asbestos Identification Laboratory**

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com
Email: mikemanning@asbestosidentificationlab.com

NVLAP®

49578

Lab Code: 200919-0

January 06, 2020

Alan Sundquist CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

Project Name:

1830 Beaver St.,

**Project Number:** 

Date Sampled:

2020-01-06

Batch:

Work Received:

2020-01-06

Work Analyzed:

2020-01-06

**Analysis Method:** 

BULK PLM ANALYSIS EPA/600/R-93/116

Dear Alan Sundquist,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- · State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- · State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Alan Sundquist for your business.

Michael Thuming

Michael Manning Owner/Director January 06, 2020

Alan Sundquist CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

**Project Name:** 

1830 Beaver St.,

**Project Number:** 

Date Sampled:

2020-01-06

Work Received:

2020-01-06

Work Analyzed:

2020-01-06

**Analysis Method:** 

BULK PLM ANALYSIS EPA/600/R-93/116

eldID	Material	Location	Color	Non-Asbestos	%	Asbestos %
LabID						
\	Gray Fire Motar	Admin Bld.	gray	Non-Fibrous	100	None Detected
549748						
	Gray Fire Motar	Admin Bld.	gray	Non-Fibrous	100	None Detected
549749						
,	Gray Fire Motar	Admin Bld.	gray	Non-Fibrous	100	None Detected
549750						
	Green Vapor Barrier	Farmhouse	green	Cellulose		None Detected
549751				Non-Fibrous	10	
	Green Vapor Barrier	Farmhouse	green	Cellulose		None Detected
549752				Non-Fibrous	10	
,	Green Vapor Barrier	Farmhouse	green	Cellulose		None Detected
549753				Non-Fibrous	10	
	Black Vapor Barrier	Farmhouse	black	Cellulose		None Detected
549754				Non-Fibrous	50	
	Black Vapor Barrier	Farmhouse	black	Cellulose	50	None Detected
549755				Non-Fibrous	50	
	Black Vapor Barrier	Farmhouse	black	Cellulose	50	None Detected
540756				Non-Fibrous	50	
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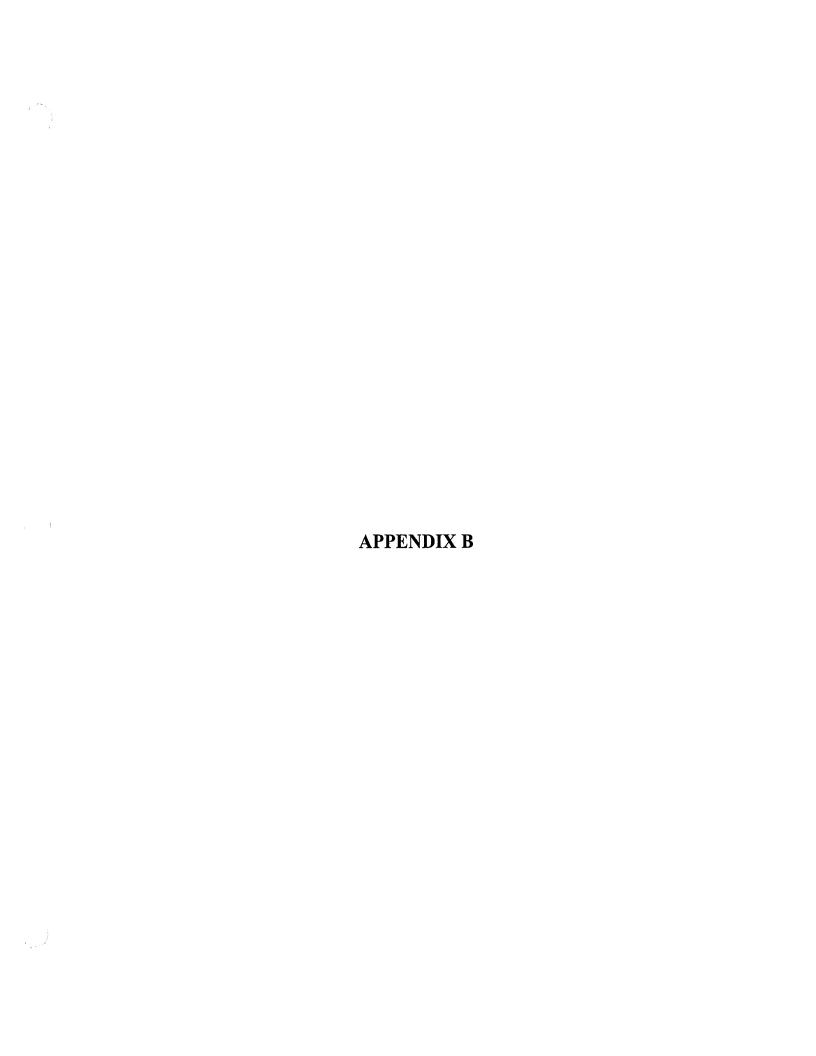
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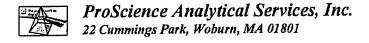
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Page 2 of 3

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																									05	<u>}</u>		<u></u>	>	Cellulose	Non-Asbestos Percentage (%)
																														Hair	s Pe
																														Synthetic	rcen
																														Other	tage
																								1	$\mathcal{Z}$					Non-Fibrous	8

Page 3\_of 3





Telephone: 781-935-3212 Facsimile: 781-932-4857

Email: chemistry@proscience.net

## Laboratory Report

Contact:

Alan Sundquist

Client:

CDW Consultants, Inc.

Address:

6 Huron Drive Natick, MA 01760 Batch #: C 301435

Date received: 11/25/2019 Date analyzed: 11/26/2019

Date of report: 11/26/2019

AIHA-LAP, LLC Lab ID 102754

Project # 1830.10 P.O.# N/A Project Site: Beaver St.

## Lead Analysis In Paint Using SOP Based on SW846-7420/3051 Results in weight percent on an "as received" weight basis

		Sample			Reporting	
Lab ID	Client ID	date	Description	Result	Limit	Comments
C 638190	LBP 1	11/20/19	Black Paint	<rl< td=""><td>0.019</td><td></td></rl<>	0.019	
C 638191	LBP 2	11/20/19	White Paint Molding / Stairs	0.27	0.010	
C 638192	LBP 3	11/20/19	White Ceiling Paint	<rl< td=""><td>0.0053</td><td>paint+plaster</td></rl<>	0.0053	paint+plaster
C 638193	LBP 4	11/20/19	White Wall Paint	<rl< td=""><td>0.023</td><td></td></rl<>	0.023	
C 638194	LBP 5	11/20/19	Blue Paint Wall / Door	0.32	0.0086	
C 638195	LBP 6	11/20/19	Gray Paint Door / Molding	0.26	0.0074	paint+wood
C 638196	LBP 7	11/20/19	Black Paint Molding / Stairs	0.069	0.014	

Simona Peavey, Tech. Manager Chemis

Aimee Cormier, Lab Director

Page

1

of

Unless otherwise indicated, all samples were received in acceptable condition.

All results apply only to the samples tested and as received and are accurate to no more than three significant figures.

Unless otherwise indicated, all the quality control criteria for the method above have been met.

RL-Reporting Limit(%by weight)

Note on units: mg/Kg is the same as ppm by weight.

RL-Reporting Limit; Defined as the lowest concentration the laboratory can accurately quantitate.

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61/04/11	186	BLACK PAINT	12				<b>↓</b>		cu) (sd m)	(grams)	JII n Heading	HESOLI	(38/90
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11/2/11	18/	WHITE CEILING PAINT	5 PAINT										26
	18P	WHITE WALL PAINT	L PAINT										93
	181	BUEPAINT WALL/OOR	WALL/OOOR										ηb
	LBP 6	CRAY PAINT DOOR / MOUDING	Dook/Molygins										97
	187	BLACK PAINT MOUNINGSAMS	MOLDINS/SAMS										H
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APPENDIX C



## PRE-DEMOLITION/RENOVATION ASBESTOS SURVEY

# 240 BEAVER STREET WALTHAM, MASSACHUSETTS

ATC PROJECT NO. 01-207319.07.43 DOCUMENT NO. 48496 NOVEMBER 28, 2016

Prepared by:

ATC Group Services LLC 588 Silver Street Agawam, MA 01001 Phone: (413) 789-3530

Fax: (413) 789-2776

Prepared for:

University of Massachusetts 117 Draper Hall Amherst, MA 01003

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Tables 3.1.A – Table 3.1.L

# APPENDICES:

Appendix A October 2016 Laboratory Data

## **EXECUTIVE SUMMARY**

ATC Group Services LLC formally, Environmental Compliance Services, Inc. (ECS) has completed a survey on October 19, 2016 as an addition to previous surveys for asbestos containing materials (ACM) at six structures located at 240 Beaver Street in Waltham, MA. The non-destructive surveys were performed to identify regulated materials that may be disturbed if any demolition or renovation activities are proposed in the future. Survey findings for the subject sites are presented in the body of this report. The results of this survey do not meet the requirements of the National Emissions Standard for Hazardous Air Pollutants (NESHAPs) for building demolition due to the following limitations:

## **Administration Building**

- Destructive sampling was not employed due to the occupied nature of the building.
- Roof sampling was not preformed due to the occupied nature of the building.

#### **Boiler House**

- Interior of the smoke stack was not assessed.
- Boilers were not inspected.

#### Corn Lab

• Exterior walk-in cooler was not inspected.

## **Throughout Property**

• Underground utilities were not assessed (heating and electrical).

ATC inspectors collected an additional 84 bulk samples of suspect ACM from the interior and exterior of various buildings throughout the property. These samples were analyzed by an accredited laboratory for asbestos content. Analytical results indicate there are numerous materials that are ACM or assumed ACM. Some ACMs identified are components within a building system, such as mastic and floor tile. In this case, the entire system is considered asbestos containing. The inventory of ACM's below is a combination of the previous survey results and the current survey results.

## **Administration Building**

Findings are presented in Tables 3.1.A (Asbestos Containing Materials) and 3.1.G (No Asbestos Detected) and summarized below;

#### ACM -

- · Thermal systems insulation
- Gray with white specks 9"x9" floor tile and associated mastic
- Cream with gray and black specks 12"x12" floor tile and associated mastic
- Brown 9"x9" floor tile and associated mastic
- Brown 12"x12" floor tile and associated mastic
- Black with white specks 12"x12" floor tile and associated mastic
- Window glazing compound
- Window casing caulking
- Sink countertop (transite) and stored transite boards
- Square patterned linoleum countertop
- Blue and white residual acoustical ceiling plasters
- Brown stick pin adhesive on duct work
- Black soundboard adhesive

## **Gray Building**

Findings are presented in Tables 3.1.B (Asbestos Containing Materials) and 3.1.H (No Asbestos Detected) and summarized below;

#### ACM-

- Gray with white specks 9"x9" floor tile and associated mastic
- Vapor barrier paper
- Green or blue transite boards
- Laboratory sink countertops (transite) and fume hood counter
- White sink undercoating
- Thermal systems insulation
- Window glazing compound
- · Window casing caulking
- Black with white streaks counter top sheetgoods
- Decorative plaster skim coat
- Cementitious coating over cork
- Brown adhesive associated with faux tile sink splash guard

## Greenhouses

Findings are presented in Tables 3.1.C (Asbestos Containing Materials) and 3.1.I (No Asbestos Detected) and summarized below;

### ACM-

- Thermal systems insulation
- Corrugated wall panel and transite board
- Sink undercoat
- Window glazing compound
- Window casing compound
- Caulking
- Black panel adhesive
- Yellow foam insulation adhesive

## Corn Lab

Findings are presented in Tables 3.1.D (Asbestos Containing Materials) and 3.1.J (No Asbestos Detected) and summarized below;

#### ACM-

- Gray with white streaks 9"x9" floor tile and associated mastic
- Stored transite board
- Stored corrugated transite panels
- Door casing caulking
- Gray sink undercoat
- Window glazing compound for the greenhouse

## Pesticide Shed and Greenhouse

Findings are presented in Tables 3.1.E (Asbestos Containing Materials) and 3.1.K (No Asbestos Detected) and summarized below;

#### ACM-

Window glazing compound

## **Boiler Building**

Findings are presented in Tables 3.1.F (Asbestos Containing Materials) and 3.1.L (No Asbestos Detected) and summarized below;

#### ACM-

- Door casing caulking
- Exterior window casing caulking
- Exterior window glazing compound
- · Roping around smoke stack metal breeching
- Incinerator components
- Yellow insulation between metal boiler breeching flanges
- Floor tile in storage (boxes)

Analytical data sheets for samples collected during the October 2016 survey are provided as Appendix A. Upon request ATC can provide the 2007 survey report including PLM and Paint Chip lab data.

The following report summarizes the independent conclusions representing ATC's best professional judgment based on information and data available to us during the course of this investigation. Factual information regarding operations, conditions, and test data provided by the Client, owner, or their representative has been assumed to be correct and complete. Additionally, the conclusions presented are based on the conditions that existed at the time of the assessment.

Inspector Signature:

Eric Kubic

Massachusetts Asbestos Inspector # AI000327

Senior Field Technician

Robert Larose

Field Technician

Christopher L. Godfrey

Christopher L. Horlfuy.

Senior Project Manager

## 1.0 INTRODUCTION

This survey was performed at the request of Mr. Michael Grover with the University of Massachusetts, Amherst Environmental Health & Safety department for the purpose of identifying hazardous building materials that may exist within the currently occupied and unoccupied structures at 240 Beaver Street in Waltham, Massachusetts. ATC conducted limited asbestos inspections on six structures located at the property. The structures inspected are as follows: Administrative Building, Gray Building, Greenhouse(s), Corn Lab, Boiler House and Pesticide Shed. The Administrative Building is an occupied 3 level office building. The Gray Building is an unoccupied 3 level building with a functioning and occupied garage addition. The Greenhouses are 1 level unoccupied structures associated with the Gray Building, Corn Lab and Pesticide Shed. The Corn Lab is a 1 level unoccupied laboratory building. The Boiler House is a 2 level occupied mechanical space. The Pesticide Shed is a 1 level occupied storage structure.

Regulatory requirements and survey practices applicable to demolition projects in Massachusetts are as follows, but not limited to the following:

#### Asbestos

- > The United States Environmental Protection Agency (USEPA) National Emissions Standard for Hazardous Air Pollutants (NESHAPs, 40 CFR 61, Subpart M) requires facilities be inspected by competent persons for the presence of asbestos containing materials (ACM) which could or will be disturbed during renovation, construction and demolition activities. Where quantities of ACM exceed 160 square feet or 260 linear feet, asbestos abatement (removal) is required.
- ➤ The Massachusetts Department of Environmental Protection (MassDEP) additionally regulates ACM under 310 CMR 7.15 & 310 CMR 19.061.
- ➤ The Massachusetts Department of Labor and Workforce Development, Department of Occupational Safety (MA DLWD-DOS) regulates asbestos worker protection and work practices under 453 CMR 6.00.
- ➤ The Occupational Safety and Health Administration (OSHA) regulates asbestos worker protection under 29 CFR 1926.1101.

#### 1.1 LIMITATIONS

The term "non-destructive sampling method" refers to a method of collecting samples that does not significantly impact interior or exterior finishes of the building. Surveys for the presence of ACM are therefore limited to those materials accessible by non-destructive sampling methods. ACM may be present in materials not accessible by this sampling methodology, and may be encountered during renovation or demolition of the structure. The term "destructive sampling method" refers to the method of collecting samples that would require destruction of various building systems (i.e. wall cavities, ceilings, flooring materials, roofing) for the purpose of locating hidden heating, plumbing, or other building components that may contain ACM. Destructive methods are recommended for properties slated for demolition. Additional limitations may exist for both destructive and non-destructive sampling methods. Certain locations of the building may be physically inaccessible, or inaccessible due to electrical, mechanical, structural, or other hazards which might exist in the structure at the time of the survey.

ATC evaluated accessible spaces of the buildings. Areas that were accessible only through structurally damaging methods or were part of or within energized equipment were not evaluated.

Two newer vintage boilers were observed within the boiler house. It appears that the identical boilers were installed sometime during the 2000's. One of the boilers was operating at the time of our survey and the other boiler was being used for parts. It cannot be definitively stated that this equipment does not contain ACM without performing destructive sampling. It is recommended that a NESHAPs trained person evaluate this equipment before demolition activities.

An exterior walk-in cooler was observed behind the Corn Lab. It cannot be definitely stated that this equipment does not contain ACM without performing destructive sampling. It is recommended that a NESHAPs trained person evaluate this equipment before demolition activities.

ATC inspectors suspect that there are underground utilities that may contain hazardous materials (Asbestos, Lead, PCB's etc). ATC recommends that any MEP drawings be consulted prior to any excavation that may unearth any potential hazardous materials.

Suspect ACM subsequently identified or encountered in physically inaccessible areas during demolition and/or demolition activities and not listed in this report should be assumed to contain asbestos unless testing confirms otherwise.

The following areas were not included in the scope of work at the time of this evaluation.

- Materials only accessible through structural demolition;
- Materials entombed or beneath concrete;
- Materials associated with functional equipment, machinery, and building systems including mechanical, plumbing, electrical and HVAC; and
- Materials below-grade.

### 2.0 METHODS AND MATERIALS

### 2.1 ASBESTOS

Samples were collected per regulations governing asbestos surveys. Samples were placed into plastic bags with an air tight seal. Labels were affixed to the sample bags with specific nomenclature.

Bulk samples were analyzed by Polarized Light Microscopy (PLM) using the USEPA/600/R-93/116 method. Sample analysis was conducted by ProScience Analytical Services, Inc., 22 Cummings Park, Woburn, Massachusetts (NVLAP Accreditation 2000090-0).

There are six minerals grouped into the term "asbestos". Chrysotile, amosite, and crocidolite are the asbestos minerals most commonly found in building materials. ACM is defined as a material containing more than one percent (1%) asbestos by weight. ACBM is a subset of materials in the group ACM and are considered to be ACM that is found in or on interior structural members of a building. Materials found to be asbestos containing are listed in Section 3.0. Exact sample compositions are included in the laboratory reports or chains of custody found in Appendix A.

Types, locations, estimated quantities, and conditions of ACM or assumed ACM are shown in Tables 3.1.A, B, C, D, E and F. Suspect materials sampled and found not to contain asbestos are found in Tables 3.1.G, H, I, J and K.

PLM is the root method used for the identification of ACM. The USEPA Office of Research and Development (USEPA/ORD) has reviewed data from performance audits of various laboratories performing PLM. The results of that review indicated an unacceptable number of false negatives and positives for visual estimation of materials containing less than 10% asbestos. On the basis of those findings the NESHAP regulations were amended on November 20, 1990 (Federal Register, V.55, and N.224). The revisions state that if the analyst detects asbestos in the sample and estimates the amount to be less than 10% by visual estimation, the parties legally responsible (owner or operator) for the building may (1) elect to assume the amount to be greater than 1% and treat the material as ACM or (2) require verification of the amount by point counting. Point counting is a technique used to quantify the amount of asbestos present in a sample on which PLM has already been performed. ATC recommends point counting re-analysis for asbestos values less than 10%, and where applicable, those results are reflected in this report. In instances where client authorization is not received for this re-analysis, PLM visual results indicating a trace or 1% value will be reported as assumed ACM as required by item (1) above.

A similar situation exists for matrix bound fibers such as those found in floor tiles, mastics, and asphalt based materials. The organic matrix of these bulk samples may interfere with the identification and quantification of asbestos mineral content. These types of samples are generally referred to as Non-friable organically bound (NOB) materials. Transmission Electron Microscopy (TEM-NOB) is a method that utilizes a combination of special sample preparation techniques and high magnification to quantify asbestos content with greater accuracy than PLM. Currently only the State of New York has regulations requiring TEM-NOB re-analysis of suspect ACM for which negative or trace determination resulted from PLM analysis. Although additional cost is involved, ATC recommends TEM-NOB analysis under certain circumstances, as a state of the art means of survey. ATC submitted one sample (17A- Brown/black styrofaom adhesive) for TEM-NOB analysis. The results confirmed that No Asbestos was detected in that sample.

### 3.0 RESULTS AND FINDINGS

The results of this survey are presented below in tabular form. These tables summarize the nature, distribution and estimated quantity of ACM found during this survey and a previous survey conducted in 2007 by Environmental Compliance Services, Inc.

Asbestos Containing Materials are found in Tables 3.1.A, B, C, D, E and F.

Suspect materials sampled with No Asbestos Detected are found in Table 3.1.G, H, I, J, K and L.

### 4.0 DISCUSSION AND INTERPRETATION

### 4.1 ASBESTOS

Response actions are based in part upon our current understanding of area usage or future usage at the time of the survey. Removal is always required where pending demolition will disturb ACM's. Any material discovered in the course of demolition activities, which is not identified in this report, should be presumed to contain asbestos until sampling shows otherwise. Section 1.1 Limitations details areas that were deemed inaccessible or were not included in the scope of work.

Pre-Demolition/Renovation Asbestos Survey 240 Beaver Street Waltham, Massachusetts

### 5.0 CONCLUSION

Asbestos abatement of items listed in Tables 3.1.A, B, C, D, E and F will be required prior to any demolition work that would disturb these materials. ATC recommends the preparation of an asbestos abatement design specification to direct the safe and efficient removal of ACM materials from these locations. ATC also recommends a timely response action related to ACMs which have been observed as damaged or otherwise non-intact, specifically ACMs within occupied spaces.

# Table 3.1.A Asbestos Containing Materials and Affected Building Component Systems

### Administration Building

Field ID	Description	Location Therm	Result	Material Class lation	Friability & Access	Condition Assessment	Est. Quantity	
N/A		Room 01		TSI	Friable, Accessible	Intact	121 LF	
Admin 18		Room 02		TSI	Friable, Accessible	Intact	75 LF	
N/A		Room 03		TSI	Friable, Accessible	Intact	85 LF	
N/A		Room 04		TSI	Friable, Accessible	Intact	110 LF	
N/A		Room 05		TSI	Friable, Accessible	Intact	95 LF	
N/A		Room 06		TSI	Friable, Accessible	Intact	100 LF	
N/A		Room 07		TSI	Friable, Accessible	1 LF Damage, Remainder Intact	100 LF	
N/A		Room 08		TSI	Friable, Accessible	Intact	155 LF	
N/A		Room 09		TSI	Friable, Accessible	Intact	20 LF	
N/A		Room 09A		TSI	Friable, Accessible	Intact	20 LF	
N/A		Room 10		TSI	Friable, Accessible	Intact	20 LF	
Admin 19		Room 12		TSI	Friable, Accessible	Intact	173 LF	
Admin 22, 23, 24		Room 13		TSI	Friable, Accessible	Intact except for 6 LF, Accessible	67	
Admin 20, 21		Room 14 and 14A		TSI	Friable, Accessible	Intact except for 9 LF	150 LF	
N/A		Room 15		TSI	Friable, Accessible	Intact	70 LF	
N/A		Room 16		TSI	Friable, Accessible	Intact	50 LF	
N/A		Room 16A		TSI	Friable, Accessible	Intact except for l LF, Accessible	100 LF	
N/A		Room 17		TSI	Friable, Accessible	Intact	150 LF	
N/A		Room 18		TSI	Friable, Accessible	Intact	21 LF	
N/A		Room 19		TSI	Friable, Accessible	5 LF Damaged, Remainder Intact	40 LF	
N/A		Hallway 099B and 099D	5%-80%	TSI	Friable, Accessible	Intact	230 LF	
N/A	Thermal Systems Insulation	Hallway 099 E	Chrysotile and/or 30%- 40% Amosite	TSI	Presumed above hard ceiling.	Condition unknown	100 LF	
N/A		Hallway 099C	40% Amosic	TSI	Friable, Accessible	Intact	4 LF	
N/A		Hallway 099A		TSI	Friable, Accessible	Intact	20 LF	
N/A		Hallway adjacent to 099A		TSI	Friable, Accessible	Intact	25 LF	
N/A		Room 101		TSI	Friable, Accessible	Intact	2 LF	
N/A		Room 102		TSI	Friable, Accessible	Intact	15 LF	
N/A		Room 103		TSI	Friable, Accessible	Intact	40 LF	
N/A		Room 104		TSI	Friable, Accessible	1 LF Damaged, Remainder Intact	40 LF	
N/A		Room 105		TSI	Friable, Accessible	Intact	40 LF	
N/A		Room 108A		TSI	Friable, Accessible	1 SF Damaged, Remainder Intact	75 LF, 5 SF debris	
N/A		Room 109A		TSI	Friable, Accessible	Intact	20 LF	
N/A		Room 112		TSI	Friable, Accessible	Intact	15 LF	
N/A		Room 117		TSI	Friable, Accessible	Intact	15 LF	
N/A		Room 119		TSI	Friable, Accessible	Intact	50 LF	

		_		_				
	N/A				TSI	Friable, Accessible	Intact	10 LF
	N/A	]		]	TSI	Friable, Accessible	Intact	25 LF
*** 	N/A	1		1	TSI	Friable, Accessible	Intact	10 LF
·	N/A				TSI	Friable, Accessible	Intact	2 LF
	N/A				TSI	Friable,	Intact	12 LF
	N/A	1		1	TSI	Accessible Friable,	Damaged	3 LF
	N/A	1		-	TSI	Accessible Friable,	Intact	8 LF
		-		-		Accessible Friable,		
	N/A	_		-	TSI	Accessible Friable,	Intact	15 LF
	N/A				TSI	Accessible Friable,	Intact	3 LF
	N/A			_	TSI	Accessible	Damaged	13 LF
	N/A				TSI	Friable, Accessible	Damaged	13 LF
	Field ID	Description	Location	Result		Friability & Access	Condition Assessment	Est. Quantity
				e and Associate		Non-friable,	T	100.05
		Residual black mastic	Room 03		Misc.	accessible	Intact	100 SF
			Room 10		Misc.	Non-friable, accessible	Intact	230 SF
			Room 12		Misc.	Non-friable, accessible	Approx. 200 SF damaged	300 SF
			Room l6		Misc. accessible da  Misc. Non-friable, accessible  Misc Non-friable,	Intact	90 SF	
	Admin 06,		Room 101		Misc.	Non-friable, accessible	Intact	230 SF
	6M, Admin 05, 5M	, 5M Gray with white specks	Room 104		Misc.	Non-friable, accessible	Intact	120 SF
	Admin 34, 34M, Admin 50, 50M	9"x9" floor tile and associated mastic	Room 104 Room 119		Misc.	Non-friable, accessible	Intact	325 SF
			Room 207		Misc.	Non-friable,	Intact	115 SF
			100/// 201			accessible Non-friable,		
			Room 208		Misc.	accessible	Intact	235 SF
			Room 211		Misc.	Non-friable, accessible	Intact	215 SF
			Room 212		Misc.	Non-friable, accessible	Intact	115 SF
			Room 213		Misc.	Non-friable, accessible	Intact	120 SF
			Room 214		Misc.	Non-friable, accessible	10 SF damaged	230 SF
	Admin 02, 2M, Admin	Cream with gray and black	Hallway 099E		Misc.	Non-friable, accessible	Intact	981 SF
	03, 04, 07, 3M, 4M,	specks 12"x12" floor tile and associated mastic	Room 19		Misc.	Non-friable, accessible	Intact	2,567 SF
		Brown 9"x9" floor tile and	Room 09		Misc.	Non-friable, accessible	20 SF Damaged	100 SF
	25M	associated mastic	Room 09A		Misc.	Non-friable, accessible	Intact	100 SF
	Admin 28, 28M	Brown 12"x12" floor tile and associated mastic	Hallway 099C		Misc.	Non-friable, accessible	Intact	62 SF
	20141	and associated mastic	Hallway 099D	2% Chrysotile	Misc.	Non-friable, accessible	Intact	66 SF
			Room 102		Misc.	Non-friable, accessible	Intact	140 SF
	1				Misc.	Non-friable,	Intact	150 SF
			Room 105			accessible		
			Room 105 Room 108		Misc.	Non-friable, accessible	Intact	16 SF
						Non-friable,	Intact Intact	16 SF 170 SF

			7				
		Room 112			Non-friable, accessible	Intact	250 SF
		Room 112A		Misc.	Non-friable, accessible	Intact	25 SF
		Room 117		Misc.	Non-friable, accessible	Intact	220 SF
Admin 25,		Room 118		Misc.	Non-friable, accessible	Intact	20 SF
25M, Admin 46,	Brown 9"x9" floor tile and	Room 120		Misc.	Non-friable, accessible	Intact	120 SF
Admin 54, Admin 38,	associated mastic	Room 121		Misc.	Non-friable, accessible	Intact	160 SF
49, 38M		Room 122		Misc.	Non-friable, accessible	Intact	320 SF
		Room 124		Misc.	Non-friable, accessible	Intact	115 SF
		Hallway 199D		Misc.	Non-friable, accessible	Intact	170 SF
		Room 201		Misc.	Non-friable, accessible	Intact	225 SF
		Room 202		Misc.	Non-friable, accessible	Intact	112 SF
		Room 203		Misc.	Non-friable, accessible	Intact	110 SF
		Room 204		Misc.	Non-friable, accessible	Intact	340 SF
		Room 209		Misc.	Non-friable,	Intact	340 SF
		Room 210		Misc.	Non-friable,	Intact	135 Sf
		Hallway 299B and		Misc.	accessible Non-friable,	Intact	425 SF
Admin 40, 40M	Black with white specks 12"x12" floor tile and	299C Hallway 199B			accessible Non-friable, accessible	Intact	340 SF
Field ID	associated mastic  Description	Location	Result	Material Class	Friability &	Condition	Est. Quantity
		Exterior windo	w glazing and o		Access	_Assessment_	
Admin 31, 32, 33, 47, 48, 64, 65, 66	Window glazing compound and casing caulking	Exterior of building	2%-10% Chrysotile	Misc.	Non-friable, Accessible	~75% are Damaged	115 Windows
Field ID	Description	Location	Result Transite	Material Class	Friability & Access	Condition Assessment	Est. Quantity
	Transite Counter Top Sink	Room 11		Misc.	Non-friable, accessible	Intact	26 SF
	Counter top transite	Room 214	15%	Misc.	Non-friable, accessible	Damaged	30 SF
Admin 61		Room 109	Chrysotile	Misc.	Non-friable, Accessible	Intact	4 SF
	Stored transite	Room 205		Misc.	Non-friable, Accessible	Intact	30 SF
Field ID	Description	Location Sheet	Result	Class	Friability & Access	Condition Assessment	Est. Quantity
07A, 07B	Square Pattern Linoleum on Counter	Room 101	20% Chrysotile	Misc.	Non-friable, Accessible	Intact	30 LF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Ouantity
Admin 15B, 16B, 15W, 16W	Residual acoustical ceiling plaster (two layers, blue and white) left after abatement was completed.	Room 019 Perimeter	2% Chrysotile	Surf.	Friable, Accessible	Intact	1/4"-1/2" strip around the ceiling perimeter
Field ID	Description	Location	Result Miscellaneous	Material Class	Friability & Access	Condition Assessment	Est. Quantity
01A, 01B	Brown Stick Pin Adhesive on Metal Ductwork	019- Auditorium	10% Chrysotile	Misc.	Non-Friable; Accessible	Intact	200 SF
124 125	Black Soundboard	Room 09A (Patch)	10% Chrysotile	Misc.	Non-Friable; Accessible	Intact	10 SF
13A, 13B	Adhesive	Room 202	10% Chrysotile	Misc.	Non-Friable; Accessible	Intact	30 SF
				WCGGLESS			

Field ID	Description	Location	Result	Material Class	Friability &	Condition Assessment	Est. Quantity
		Flooring	and Associated				
		Room 105		Misc.	Non-friable, accessible	Intact	350 SF
		1st floor hallway		Misc.	Non-friable, accessible	Intact	150 SF
		1st floor bathroom		Misc.	Non-friable, accessible	Intact	50 SF
		Ist floor small storage room adjacent to large storage room		Misc.	Non-friable, accessible	Intact	150 SF
Gray 10,10V,	Gray with white specks	2nd floor hallway		Misc.	Non-friable, accessible	Intact	200 SF
11, 13, 27, 27P 28,	9"x9" floor tile, Associated Vapor Barrier	Small room in 2nd floor hallway	<1%-15% Chrysotile	Misc.	Non-friable, accessible	Intact	70 SF
10M, 11M, 27M, 28M	Paper and associated mastic	Room 202		Misc.	Non-friable, accessible	Intact	120 SF
27101, 20101	·	Room 202A		Misc.	Non-friable, accessible	Intact	175 <b>S</b> F
		Room 203		Misc.	Non-friable, accessible	Damaged	160 SF
		Room 203A		Misc.	Non-friable, accessible	Intact	85 SF
		Room 204		Misc.	Non-friable,	Intact	260 SF
		Room 204A		Misc.	accessible Non-friable,	Intact	130 SF
		Room 221		Misc.	accessible Non-friable,	Intact	225 SF
					accessible Non-friable,		
		Room 221A		Misc.	accessible	Intact  Condition	160 SF
Field ID	Description	Location boards, Transite sint	Result	Class	Access	Assessment	Quantity
	THE RESERVE OF THE PERSON OF T	Room 105	59851113590711180	Misc.	Non-friable,	Intact	45 SF
		Room 201		Misc.	accessible Non-friable, accessible	Intact	15 SF
	Green or blue transite	Room 203		Misc.	Non-friable,	Intact	8 SF
Gray 39	boards	Room 204		Misc.	Non-friable, accessible	Intact	18 SF
		Basement near stairs to sub-basement	5%-20%	Misc.	Non-friable, accessible	Intact	5 SF
N/A	Fume hood counter	Room 204	Chrysotile	Misc.	Non-friable, accessible	Intact	10 SF
Gray 24	Laboratory/sink	1st floor large room		Misc.	Non-friable, accessible	Intact	12 SF
Gray 38	countertops Laboratory/sink	Room 201		Misc.	Non-friable,	Intact	10 SF
Gray 42	countertops Laboratory/sink	Room 204		Misc.	Non-friable,	Intact	5 SF
09A, 09B	countertops (small sink) White Sink Undercoating	Room 105		Misc.	accessible Non-friable,	Intact	1 Unit
	Description	Location	Result	Material	Accessible Briedhility &	Condition	DSTA
		Therm Sub-basement Pipe	al Systems Insu	lation	E-i-ble		
N/A	Thermal systems insulation	Chase into Greenhouse	Presumed	TSI	Friable, non- accessible	Unknown	~200 LF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
Gray 43,	Window glazing	Windo Throughout	v Glazing Com 2% Chrysotile	nound. Misc.	Non-friable,	Damaged	60 Units
44, 45	compound		3% Chrysotile	Misc.	Accessible Non-friable,	Damaged	6 Units
12A, 12B	Window casing caulking	Garage Exterior		Materials	accessible	Condition	Dst.
Field ID	Description	Location	Result Sheet goods	Class	Access	Assessment	Quantity
10A, 10B	Black with white streaks countertop sheet goods	Room 105, Room 204	3% Chrysotile	Misc.	Non-friable, Accessible	Intact	50 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
08A, 08B, 08C	Decorative plaster skim	Ist Floor Large Storage Room , Room 203 and Room 204		Misc.	Non-friable, Accessible	Damaged	1,200 SF

01A, Gray 07, Root Cellar 02A,	Cementitious coating over cork	Sub-basement Cooler	<1%	Misc.	Non-friable, accessible	Intact	550 SF
Field ID	Description	Location	Result Adhesives	Class		Condition Assessment	
18A	Brown faux tile adhesive behind sink splash guard	Basement	2% Chrysotile	Misc.	Non-friable, accessible	Intact	10 SF
44.		aranan kultura	an a Kertalian	1 33,7 3.87	ti (in en 1,1)		

Table 3.1.C
Asbestos Containing Materials and Affected Building Component Systems

### Greenhouses

Field-ID	Description	Location	Result al Systems Insu	Chiss	Friability & Access	Condition Assessment	Est. Quantity
		Greenhouse 3 Trench		TSI	Friable, accessible	Damaged	20 LF
		Greenhouse 4 Trench		TSI	Friable, accessible	Damaged	20 LF
GH-2-04,	Thermal Systems	Greenhouse 5A/5B Trench	10%-75% Chrysotile,	TSI	Friable, accessible	Damaged	70 LF
05	Insulation	Greenhouse 6 Trench	50% Amosite	TSI	Friable, accessible	Damaged	120 LF
		Greenhouse 7 Trench		TSI	Friable, accessible	Damaged	70 LF
		Greenhouse 8 Trench		TSI	Friable, accessible	Damaged	20 LF
		Greenhouse 14 Trench		TSI	Friable, accessible	Damaged	20 LF
Field ID	Description	Location	Result Transite	Material Class	Friability & Access	Condition Assessment	Est. Quantity
	GH-5-01, Corrugated transite wall GH-1-01, panel 02, GH-4-04	Greenhouse 2		Misc.	Non-friable, Accessible	Intact	170 SF
GH-1-01,		Greenhouse 9	15%-35%	Misc.	Non-friable, Accessible	Intact	140 SF
1 '		Greenhouse 10	Chrysotile	Misc.	Non-friable, Accessible	Intact	110 SF
		Greenhouse 11		Misc.	Non-friable, Accessible	Intact	225 SF
	Green or blue transite board	Greenhouse 13		Misc.	Non-friable, Accessible	Intact	14 SF
Field ID	Description	Location	Result	Material Class	Friability & Access	Condition Assessment	Est. Quantity
GH-1-03, 04, 05, GH- 2-01, GH-3- 01, 02, 03, GH-5-02, 03, 04, 05, 06, 07, Gh- 4-01, 02	Window glazing compound	Greenhouse 1-15	Trace-15% Chrysotile	Misc.	Non-friable, Accessible	Damaged	16,000 SF
Field ID	Description	Location Ad	Result hesives and Sin	Material Class k	Friability & Access	Condition Assessment	Est. Quantity
GH-2-06	Caulking	Between Small Shed and Greenhouse	15% Chrysotile	Misc.	Non-friable, Accessible	Damaged	100 SF
05A, 05B	Black panel adhesive	Greenhouse 6	10% Chrysotile	Misc.	Non-friable, Accessible	Damaged	110 SF

GH-03A, 03B Sink Undercoat Greenhouse 8 and 7% Misc. Non-friable, Accessible Section Windows Misc. Sink Undercoat Greenhouse 15	06A, 06B	Yellow foam insulation adhesive	Greenhouse 13, Greenhouse 14, Greenhouse 15	5% Chrysotile	Misc.	Non-friable, Accessible	Intact	460 SF
Note to Windows in all the companies of extending the first place (Gale Leongrape) commod design described (All Companies Comp	GH-03A, O3B Sink Undercoat Greenhouse 8 and Greenhouse 15 Misc. Non-triable, Accessible Intact 5 SF							
	riyesi NY	ingering neuropang ses		i i ji ji ji ji ji ji ji ji ji ji ji ji	ville at New York		71116	

# Table 3.1.D Asbestos Containing Materials and Affected Building Component Systems

### Corn Lab

Field ID	Description		Result orn Lab ACM		Friability &	Condition	Est.
Corn Lab 01, 02, 1M, 2M	Gray with white streaks 9"x9" floor tile and associated mastic	Main room, entry and bathroom	15% Chrysotile	Misc.	Non-friable, Accessible	35 SF damaged	270 SF
Presumed	Stored transite board	Basement	Presumed	Misc.	Non-friable, Accessible	Intact	2 SF
Presumed	Stored corrugated transite panels	Exterior of Greenhouse	Presumed	Misc.	Non-friable, Accessible	Intact	2 Units, 30 SF Total
Corn Lab 12, Corn Lab 13	Door casing caulking	Front door and door leading to greenhouse	10% Chrysotile	Misc.	Non-friable, Accessible	Damaged	2 Doors
04A, 04B	Gray Sink Undercoating	Main room	10% Chrysotile	Misc.	Non-friable, Accessible	Intact	1 Unit
Presumed	Window glazing compound	Com lab greenhouse	Presumed	Misc.	Non-friable, Accessible	Damaged	760 LF
	aliando Alexandro (h. 1885). 1986: Antonio Departmento (h. 1885).				General Company of the Company of th		

# Table 3.1.E Asbestos Containing Materials and Affected Building Component Systems

### Pesticide Shed Greenhouse

Porticide Short Groundaries ACM
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# Table 3.1.F Asbestos Containing Materials and Affected Building Component Systems

### Boiler House

Field ID	Description	Location	Result	Material Class	Friability & . Access	Condition Assessment	Est. Quantity
Boiler Bldg 04, 05	Door casing caulking	Throughout	Umise ACN 5%-10% Chrysotile	Misc.	Non-friable, Accessible	Damaged	2 Units
Boiler Bldg 01, 02, 03, 06, 07, 08	Exterior window casing caulking and glazing compound	Throughout	2%-10% Chrysotile	Misc.	Non-friable, Accessible	Some Damaged	7 Units
Boiler Bldg 09	TSI roping around metal breeching connected to the smoke stack exterior	Exterior of the building	90% Chrysotile	TSI	Friable, Accessible	Damaged	20LF
B-01A, B-01B	Gaskets associated with steel boiler breaching	Boiler room	10% Chrysotile	TSI	Friable, Accessible	Intact	50 LF
Presumed	Insulation between steel walls of the incinerator, any other suspect components associated with the incinerator	Incinerator room	Presumed	TSI	Friable, Non- accessible	Intact	190 SF
Presumed	Stored boxes of floor tiles	Incinerator room	Presumed	Misc.	Non-friable, Accessible	Intact	2 boxes

### Table 3.1.G Suspect Materials With No Asbestos Detected

### Administration Building

SECTION AND ADDRESS OF THE PARTY OF THE PART	Description	Location
Admin- 09S, 09B,	TARREST AND A CONTRACT OF THE PARTY OF THE P	AND THE PROPERTY OF THE PROPER
10B, 10S, 11B, 11S,		
29B, 29S, 30B, 30S,	Plaster skim coat and plaster base coat	Admin. building throughout
42, 43, 45B, 45S,	l laster skilli coat and plaster base coat	riamin. Junuing intoughout
57B, 57S, 58B, 58S		
Admin- 12, 13, 14, 44	Acustical plaster (yellow and white)	Admin. building lobby area outside auditorium
Admin- 17, 26, 26M, 39, 41, 55, 56	Cove base mastic	Admin. building throughout
Admin- 27, 27M	Sound board mastic	Admin, building storage closet outside WCFO
Admin- 35, 53	Stone window sill (black)	Admin. building throughout
	Grey caulking between concrete and	
Admin- 36	black stone window sill	Admin. building 2nd floor 4H kitchen
Admin- 37, 52, 62	Lab sink	Admin. building 2nd floor 4H kitchen, room 201 and 214
Admin- 51, 51M	Lab counter top transite like material	Admin. Building room 201
	·	
02A	Black Coating on Block Wall Behind	Admin Building/ 019 - Auditorium
	Plaster Black Coating on Block Wall Behind	
02B	Plaster	Admin Building/ 019 - Auditorium
	Black Coating on Block Wall Behind	
02C	Plaster	Admin Building/ 019 - Auditorium
03A	Yellow Carpet Mastic	Admin Building/ Room 122
03B	Yellow Carpet Matic	Admin Building/ Room 122
04A	Tan Cloth Vibration Dampener	Admin Building/ Room 205A
04B	Tan Cloth Vibration Dampener	Admin Building/ Room 126
05A	Stone Pattern Linoleum on Counter	Admin Building/ Room 012
05B	Stone Pattern Linoleum on Counter	Admin Building/ Room 012
06A	Gold Adhesive assoc. w/05A	Admin Building/ Room 012
06B	Gold Adhesive assoc. w/05B	Admin Building/ Room 012
09A	Black with White Streaks Counter	Admin Building/ Room 201
09A	Sheet Goods	Admin Bulling Room 201
09B	Black with White Streaks Counter	Admin Building/ Room 201
075	Sheet Goods	Admin Bulump Room 201
10A	Silver Adhesive Associated with 09A	Admin Building/ Room 201
10B	Silver Adhesive Associated with 09B	Admin Building/ Room 201
11A	Gray Soundboard on Wall	Admin Building/ Room 09A
12A	Cream Adhesive Associated with 11A	Admin Building/ Room 09A
	greeke in Salandan e in de ara	an the surface of the
	<ul> <li>The state of the s</li></ul>	

### Table 3.1.H Suspect Materials With No Asbestos Detected

### Gray Building

ROMANDA CAMPANIAN AND AND AND AND AND AND AND AND AND A		
Gray- 04, 40, 41	Description Lab sink	From United States to State States St
19A, 19B, Gray PM- 01A	Paneling mastic (tan)	Gray building small storage room off large storage room
Gray- 02A, 08, 08P	Cork insulation and vapor barrier paper	Gray building Sub-basement, root cellar
21A, 22A, Gray-09, 09M	Beige 12"x12" floor tile w/ mastic	Gray Building 1st floor large room
03A, 04A, 05A, 05B, Gray- 12, 12P, 12M	Red and black linoleum w/ vapor paper and adhesive	Gray building room 105 office
14B, 14S, 15B, 15S, 16B, 16S, 29B, 29S, 30B, 30S, 31B, 31S	Base and skim plaster	Gray building throughout
Gray- 01, 02, 17, 18, 32, 33, 34	Sheetrock	Gray building throughout
17A, Gray-19	Mastic on styro-foam wall panels	Gray building 1st floor photo room
Gray- 03, 20, 35, 36, 37	Joint compound	Gray building basement, 1st floor hallwway and 2nd floor
Gray-25	Rolled asphalt roof	Gray building
Gray-26	Roof flashing	Gray building
07A, 07B, Gray-46	Asphalt roof shingle	Gray building flat roof between gray building and greenhouse, garage
06A, 06B	Black cork adhesive on wall	Gray building room 202
11A, 11B	Adhesive associated with black with white streaks counter sheet goods	Gray building room 105 and room 204

13A, 13B	Brown paper under wood siding	Gray building exterior south side
14A, 14B	Top layer tan paper under wood siding	Gray building exterior west side
15A, 15B	Bottom layer thin black paper under 14A, 14B	Gray building exterior west side
16A, 16B	Thick black paper under wood siding	Gray building exterior north side- garage exterior
20A, 20B	Black roof far paper	Gray building roof

Table 3.1.I Suspect Materials With No Asbestos Detected

### Greenhouses

GH-1/2 (01)	Rolled roofing	Location Greenhouse 1&2
GH-1/2 (02), GH- /4(01), GH-5B(02)	Asphalt shingles	Greenhouses
GH-1/2(03)	Vapor barrier paper	'Greenhouse 1&2 on floor
01A, 01B	Planter	Greenhouses
02A, 02B	Black Sink Undercoat	Greenhouse 9
04A, 04B	Yellow Panel Adhesive	Greenhouse 6

### Table 3.1.J Suspect Materials With No Asbestos Detected

### Corn Lab

Field ID	Description	Location
Corn Lab-03B, 03S,	Base and skim plaster	Corn Lab
04B, 04S	Dase and skim plaster	Com Lao
Corn Lab- 05, 06, 07,	Window glazing compound	Corn Lab
08, 09	Window glazing compound	Con Lab
Corn Lab-10	Asphalt roof	Corn Lab
Corn Lab-11	Asphalt flashing	Corn Lab
01A, 01B	Residual Gray Felt Backing on Floor	1st Floor Small Room
02A, 02B	Adhesive Associated with 01A and 01B	2nd Floor Small Room
03A, 03B	Cloth Duct- Round	Com Lab
KERASIA KA		
September 1	Silvering to Chican State (Section )	remains of integration Views
	interior and contract the second section of	merzetki mittili berini damen erre akkiyake so

### Table 3.1.K Suspect Materials With No Asbestos Detected

### Pesticide Shed

PS-02	Joint compound	Pesticide Shed
PS-03, 04, 06	Window glazing compound	Pesticide Shed
PS-07	Roof asphalt shingle	Pesticide Shed

### Table 3.1.L Suspect Materials With No Asbestos Detected

### Boiler House

BH-01A, BH-01B	Description  Black wrap on fiberglass pipe insulation	Location Pipe chase
in the state of th	Guidan (n. 145) de sant sant se sant se s Guidan de guida se guidan de la Guidan ac	



October 18, 2016

Eric Kubic Environmental Compliance Svcs Inc. HQ 588 Silver Street Agawam, MA 01001

Dear Eric Kubic,

The enclosed analytical results have been obtained by using the EPA/600/R-93/116 method. The "Visual Estimate" quantitative method is generally used for determining the percentage of asbestos and other components of the sample. "The Point Counting" method may also be used upon client request or at the analyst discretion. The Point Count method is usually recommended when the sample contains less than 10% asbestos by Visual estimate. Asbestos content less than 1% is recorded on the report as TR (trace).

The Quality Control data related to the samples analyzed is available upon client's written request. ProScience Analytical Services Inc., assumes no responsibility for potential sample contamination that may have occurred during the sample collection process or erroneous data provided by the client.

The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP.

All Laboratory records are retained for at least three years unless otherwise directed in writing by the client. The actual samples are retained for a period of two months and written request is necessary in order to be retained for a longer period of time. All analytical results and records are considered strictly confidential and will not be released under any circumstances to anyone except the actual client. The analytical results included in this report apply only to the items tested.

If you have any questions please contact the Laboratory Manager or the Laboratory Director.

Sincerely,

Patricia Weakley, Optical Asbestos Manager

Aimee Cormier, Laboratory Director

Thinia Weakley

Enclosure:

Version 2

LAB BATCH ID: B 102500 CLIENT PROJECT ID: N/A

Client Ref: 240 Beaver St., Waltham, MA - Corn Lab & Boiler House

AIHA ID# 102754; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056; NVLAP

Lab Code 200090-0; RI ID # AAL-093; VT ID# AL016876

Client Name:

Environmental Compliance Svcs Inc. HQ

PO #:

N/A Client Project #: N/A

Client Reference: 240 Beaver St., Waltham, MA - Corn Lab & Boiler House

Method:

EPA/600/R-93/116

Batch:

B102500

Date Sampled:

10/7/2016

Date Received: Date Analyzed:

10/13/2016 10/17/2016

Date of Report:

10/18/2016

				Asbes	fos %			Non-Asbestos %							
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON	
01A	Gray	0	0	0	0	0	0	0	0	90	TR	5	0	5	

Description: Residual Felt Backing on Floor - Gray

Location:

1st Floor, Small Room

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %			Non-Asbestos %								
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON		
01B	Gray	0	0	0	0	0	0	0	0	90	TR	5	0	5		

Description: Residual Felt Backing on Floor - Gray

Location:

1st Floor, Small Room

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %			Non-Asbestos %									
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON			
02A	Black	0	0	0	0	0	0	0	0	TR	0	0	0	100			

Location:

Description: Adhesive assoc. w/01A 1st Floor, Small Room

Comments:

Is asbestos present? No.

Analyzed: Yes

				Non-Asbestos %										
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
02B	Black	0	0	0	0	0	0	0	0	TR	0	0	0	100

Description: Adhesive assoc. w/01B

Location:

1st Floor, Small Room

Comments:

Is asbestos present? No.

Analyzed: Yes

			44	Asbes	stos %			Non-Asbestos %								
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON		
03A	Tan	0	0	0	0	0	0	0	0	0	0	95	0	5		

Description: Cloth Duct - Round

Shed Off Greenhouse

Location: Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	stos %			Non-Asbestos %								
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON		
03B	Tan	0	0	0	0	0	0	0	0	0	0	95	Ó	5		

Location:

Description: Cloth Duct - Round Shed Off Greenhouse

Comments:

Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO#:

N/A

Client Project #:

Client Reference: 240 Beaver St., Waltham, MA - Corn Lab & Boiler House

Method:

EPA/600/R-93/116

Batch:

B102500

Date Sampled:

10/7/2016

Date Received:

10/13/2016 10/17/2016

Date Analyzed: Date of Report:

10/18/2016

				Asbes	tos %			Non-Asbestos %								
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON		
04A	Gray	10	0	0	Ó	Ò	0	0	0	TR	0	0	0	90		

Description: Gray Sink Undercoating

Location:

Main Room

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos%					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
04B		0	0	Ö	0	0	0	0	0	0	0	0	0	0

Description: Gray Sink Undercoating

Location:

Comments:

Analyzed:

				Asbes	tos %					Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
B-01A	Yellow	10	0	0	0 .	0	0	0	0	0	0	0	0	90

Description: Yellow Material between Metal Boiler Breeching Flanges

Location:

**Boiler House** 

Main Room

Comments:

Is asbestos present? Yes.

Analyzed: Yes

Analyzed:

		10000000000000000000000000000000000000	50.20.70.20.2	HSUUS	stos %			l		Non-	-Asbesto	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
B-01B		0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Yellow Material between Metal Boiler Breeching Flanges

Location:

**Boiler House** 

Comments:

Non-Asbestos Codes:

Asbestos Codes:

CHR = Chrysotile FBG = Fiberglass

AMO = Amosite MNW = Mineral Wool

CRO = Crocidolite

CEL = Cellulose HAR = Hair

ACT = Actinolite

TRE = Tremolite SYN = Synthetic

ANT = Anthophyllite

NON = Non-Fibrous Minerals OTH = Other

\* All results are in percentage.

Balch # and the Sample ID (example: [Balch #] - [Sample ID]).

Note: To create a unique Analyst: Robert

Page 2 of 2

ProScience Analytical Services, Inc. PLM Asbestos Chain of Custody Record	[	☐ RUSH Turn Around Time Requested
LABORATORY/HEADQUARTERS	1	
22 Cummings Park, Woburn, MA 01801 T:781-935-3212 F:781-932-4857		☐ Same day ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 5 Days
Client: Environmental Compliance Services, Inc.	Special Instructions:	Relinquished by/date S
Address: 588 Silver Street, Agawam, MA 01001		Received by/date: Court Course and 10/13/16 0/1/10
Project Site: 240 Becover St. Waltham Mar		Samples received: ( C Analyzed: / /
Project#: Corn Lab Or	\	Faxed(E-mailed, Verbal by/date:
Phone Number: (413) 386-4774 13, 105 Hoofe		Stop on first positive (Yes ) No
Contact: Fric Klibic Eklibic Decemberation	C+NA-Cioor Tilo & Mastic I m-	Bright-Elon Tile & Maetic I m-I incleum Om-Caract Maetic Dis-Disease Door Dis-Disease Skin Coast O'

03B	83A	023	024	5110.	DIA	₽.Ħ	Lab
	<u></u>	W	<i>d.</i>	W	Φ.	Sample ID	Use
$\leftarrow$				-	11/2/01	Date Sampled	Batch #
21	Description: Cloth duct Parks Remainder Rescription: Cloth duct Parks Remainder Rescription: Shed off Green house	Per M. Lm. Cm. Pib / Pis Gyp / Jo: CT Ck. Giz Adh. Ppr Rf Description: なみ こらくのも、 一/ つ/ 写 Location: 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、	Ft M Lm Cm Plb / Pls Gyp / Jo: CT Ck Glz Adh Ppr Rf Description:	Ft/M Lm Cm Plb/Pls Gyp/Jc CT Ck Glz Adh Ppr Rf Description: U l l Location: U ( )	Description:   Ferricinal Felt backing or   Propried for the propried for	Description/Location	For Lab Use Batch # 8102500
77	O T Z T Y	SKNLW	O B WAW	D CN FY	0 K K K Y K K K K K K K K K K K K K K K	% Asbestos  Color Homogeneity Texture Friable Morphology Extinction Sign of Elongation Birefringence Pleochrolsm  —	Analyzed by/date: Analyzed by/date: Analyzed by/date: Analyzed By/date: Analyzed By/date: Analyzed by/
						Chrysotile  Amosite Crocidolite Tremolite Anthophylite Actinolite Fiberglass	Asbestos Percentage (%)
-0 #	9 1	7 4	\$ F	20 E	1 2 00 m	Mineral Wool Cellulose Hair	Non Asbestos Percentage (%)
28 5	S Sb	[Qu	Levi	2 2	V #	Synthetic Other	intege (%)

				•						. 015	7) 「フェブー		13-011+				Ì	0413		074	; 	Sample D	
										4			1/14	-			5	<		10/7/12		Date Sampled	-
Description:	Location:	ריג או בחה בחד אום אף Je CT Ck Giz Adh Ppr Ri	Location:	Description:	FITM Lm Cm plb/pls Con/ to CT CV 255 Act 755 Act	o savi bini i:	FI/M Lm Cm Plb/Pls Gyp/Jc CT Ck Glz Adh Ppr Rf	Location:	Description:	Location: Bouler House William Cm Plb/Pls Gyp/Jc CT Ck Glz Adh Por RE		Description: 7 ( 1/2 Syp/Jo Ct Ck Glz Adh Ppr Rd	Location: Boller House.	Description / // / / / / / / / / / / / / / / / /	FUM Lm Cm Phy Place Con / In Car Chi Car Con Con Phy Place Con / In Car Chi Chi Car Chi Chi Car Chi Chi Car Chi Chi Car Chi Chi Chi Car Chi Chi Chi Chi Chi Chi Chi Chi Chi Chi	Description:	FI/M Lin Cin Pib/Pis Gyp/Jc CT Ck Giz Adh Por Rr		THE MET OF THE PIET PIET OF THE SAPE IS A STATE OF THE PIET PIET OF THE PIET O	Location: Main Room.	Description gray GINK Undercouting.	Description/Location  HIM Lm Cm Plb/Pls Gyp/Jc CI Ck Glz Adh Por Rf	
										7	<b>&gt;</b>		O <sub>2</sub>								)	% Asbesto	Ś
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		$\perp$					<u> </u>						7							3		Non Fibrous	

Relinquished By.

Commants: Birefringence L= less than .010, M= .011-.029, H= greater than .03: Microscope Olympus 7 3, Serial # circle 1- 242277, 229027, 235000, 230563



Eric Kubic Environmental Compliance Svcs Inc. HQ 588 Silver Street Agawam, MA 01001 October 18, 2016

Dear Eric Kubic,

The enclosed analytical results have been obtained by using the EPA/600/R-93/116 method. The "Visual Estimate" quantitative method is generally used for determining the percentage of asbestos and other components of the sample. "The Point Counting" method may also be used upon client request or at the analyst discretion. The Point Count method is usually recommended when the sample contains less than 10% asbestos by Visual estimate. Asbestos content less than 1% is recorded on the report as TR (trace).

The Quality Control data related to the samples analyzed is available upon client's written request. ProScience Analytical Services Inc., assumes no responsibility for potential sample contamination that may have occurred during the sample collection process or erroneous data provided by the client.

The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP.

All Laboratory records are retained for at least three years unless otherwise directed in writing by the client. The actual samples are retained for a period of two months and written request is necessary in order to be retained for a longer period of time. All analytical results and records are considered strictly confidential and will not be released under any circumstances to anyone except the actual client. The analytical results included in this report apply only to the items tested.

If you have any questions please contact the Laboratory Manager or the Laboratory Director.

Sincerely,

Patricia Weakley, Optical Asbestos Manager

Aimee Cormier, Laboratory Director

Tricia Weakley

Enclosure:

Version 2

LAB BATCH ID: B 102502 CLIENT PROJECT ID: 01-207319.07.43

Client Ref: 240 Beaver St., Waltham, MA - Greenhouses

AIHA ID# 102754; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056; NVLAP

Lab Code 200090-0; RI ID # AAL-093; VT ID# AL016876

Client Name:

Environmental Compliance Svcs Inc. HQ

PO#:

N/A

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Greenhouses

Method:

EPA/600/R-93/116

Batch:

B102502

Date Sampled:

10/7/2016

Date Received:

10/13/2016 10/18/2016

Date Analyzed: Date of Report:

10/18/2016

				Asbes	tos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
01A	Gray	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Planter Location:

GH-1

Comments:

Is asbestos present? No.

Analyzed: Yes

	<del> </del>			Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
01B	Gray	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Planter

Location: GH-15

Comments:

Is asbestos present? No.

Analyzed: Yes

		1		Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
02A	Multi	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Black Sink

Location: Comments:

GH-9

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
02B	Multi	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Black Sink

Location:

GH-9

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos ‰					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
03A	Black	7	0	0	0	0	0	0	0	0	0	0	0	93

Description: Black Sink

Location:

Exterior of GH-1

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos %					Non	-Asbeste	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	НТО	NON
03B		0	0	0	0	0	0	0	0	0	0	0	0	Q

Description: Black Sink Location:

Exterior of GH-1

Comments:

Analyzed: No

Client Name:

Environmental Compliance Svcs Inc. HQ

PO #:

N/A

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Greenhouses

Method:

EPA/600/R-93/116

Batch:

B102502

Date Sampled:

10/7/2016

Date Received:

10/13/2016 10/18/2016

Date Analyzed: Date of Report:

10/18/2016

				Asbes	tos%					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
04A	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Yellow Panel Adhesive

Location:

GH-6

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %				_	Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
04B	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description:

Yellow Panel Adhesive

GH-6 Location:

Comments:

Is asbestos present? No.

Analyzed: Yes

	<del></del>	TA CO		Asbes	stos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
05A	Black	10	0	0	0	0	0	0	0	0	0	0	0	90

Description: Black Panel Adhesive

Location:

05A

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
05B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description:

Black Panel Adhesive

Location:

Comments:

Analyzed: No

				Asbes	stos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
06A	Brown	8	0	0	0	0	0	0	0	0	0	0	0	92

Description:

Brown Wall Foam Adhesive

Location:

GH-15

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos:%			1		Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
06B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description:

Brown Wall Foam Adhesive

Location:

GH-15

Comments:

Analyzed: No

Asbestos Codes:

CHR = Chrysotile FBG = Fiberglass

AMO = Amosite MNW = Mineral Wool CRO = Crocidolite CEL = Cellulose

ACT = Actinolite HAR = Hair

TRE = Tremolite SYN = Synthetic

ANT = Anthophyllite

OTH = Other

NON = Non-Fibrous Minerals

on-Asbestos Codes: vote: To create a unique lab sample ID, use the Balch # and the Sample ID (exemple: (Batch #) - [Sample ID]).

\* All results are in percentage.

Analyst: Michelle Weakley

# ProScience Analytical Services, Inc. PLM Asbestos Chain of Custody Record

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□ RUSH

Description: ( ) Location: ( )	OBA 10/7/11 Location: Extremer art. 6-11-1	Description: Black Stack  CT CK Giz Adh Ppr Rf  Description: Black Stack  CT CK Giz Adh Ppr Rf  M  CT CT CK Giz Adh Ppr Rf  M  CT CT CK Giz Adh Ppr Rf	Description: 3/20K 5: 7K  Description: 3/20K 5: 7K  Description: 6/7/6 Location: 6/4-9	Description: 7 /2 x 3 e :  O 1 13 10/7/16 Location: 6-H-34 15-	% Asbestos Color Homogeneity Texture Friable Morphology Extinction Sign of Elongation Birefringence Pleochrolsm	e Batch# 8/00507	Contact: Eric Kubic @ecsconsult.com    Contact:   Conta	ite: 240 Becver St. Walthown Ma.  BI-201319.07.43 Kroenthouses	Client: Environmental Compliance Services, Inc. Special Instructions: Relinquished by/date: Address: 588 Silver Street, Agawam, MA 01001	LABORATORY/HEADQUARTERS 22 Cummings Park, Woburn, MA 01801 □ Same day □ 24 Hour □ 1:781-935-3212 F:781-932-4857
z Adh Ppr Ri	D 60H 2 LILL + LW/6/16	B	Ø	Z Adh Ppr Re	% Asbestos  Color  Homogeneliy  Texture  Frieble  Morphology  Extinction  Sign of Elongation  Birefringence  Pleochrolsm	c-Joint Compound, CT-Ceiling Tile, Ck-Caulk, Adh-Adhesive, April    Color Compound	Stop on first positive (Yes ) No	Mar	Relinquished by/date: 10/12/16	Same day []

2573 66A 0673 05 A 0413 Commants: Birefringence L= less than .010, M= .011-.029, H= greater than .03: Microscope Olympu 18/7/16 Location: & H - & FI/M Lm Cm Plb/Pls G 10/7/12 10/7/12 Location: カタフス FI/M Lm Cm Plb/Pls Gyp/Jc CT Ck Glz(Adh Ppr Rt Description: うらっという いるい たっこへ るびん Location: 6-14-15 Description: / \ Location: (-)+-15-Location: 05-0 Ft/M Lm Cm Plb/Pls Gyp/Jc CT Ck Glz Adh Ppr Ri Location: G + H - CFITM Lm Cm PIB1PIs Gyp13c CT Ck Giz Adh Ppr Rf Description: Ft/M Lm Cm PIb/PIs Gyp/Jc CT Ck Glz Adh Ppr Rf Description: Ft/M Lm Cm PIB/PIS Gyp/Jc CT Ck Giz Adh Ppr Rf Description: Description: Location: Description: FI/M Lm Cm Plb/Pls Gyp/Jc CT Ck Glz Adh Ppr Rf FI/M Lm Cm PIb/PIs Gyp/Jc CT Ck Glz Adh Ppr Rf Location: Location: Location: PRINCE | AUL 12 SE S Date: 0

Sample

240 Beaver Street- Waltham

Ma

Green houses

Ħ

Date Sampled

Description/Location

% Asbestos

Homogenelly Texture Friable Morphology

Extinction
Sign of Elongation
Birefringence
Pleochroism

Chrysotlie

Amosite
Crocidolite
Tremolite
Anthophylite
Actinolite

Fiberglass

Mineral Wool

Cellulose

Synthetic

Non Fibrous

Other

Hair

Color

0412

16/7/161

FI/M Lin Cin Plb/Pls Gyp/Jc CT Ck Giz Adh Ppr Rt Description: ケモノレルン デェッモノ /チェルニ



October 18, 2016

Eric Kubic Environmental Compliance Svcs Inc. HQ 588 Silver Street Agawam, MA 01001

Dear Eric Kubic,

The enclosed analytical results have been obtained by using the EPA/600/R-93/116 method. The "Visual Estimate" quantitative method is generally used for determining the percentage of asbestos and other components of the sample. "The Point Counting" method may also be used upon client request or at the analyst discretion. The Point Count method is usually recommended when the sample contains less than 10% asbestos by Visual estimate. Asbestos content less than 1% is recorded on the report as TR (trace).

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If you have any questions please contact the Laboratory Manager or the Laboratory Director.

Sincerely,

Patricia Weakley, Optical Asbestos Manager

Aimee Cormier, Laboratory Director

Enclosure:

Version 2

LAB BATCH ID: B 102506 CLIENT PROJECT ID: 01-207319.07.43

Client Ref. 240 Beaver St., Waltham, MA - Admin. Building

AIHA ID# 102754; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056; NVLAP

Lab Code 200090-0; RI ID # AAL-093; VT ID# AL016876

Client Name:

Environmental Compliance Svcs Inc. HQ

PO#:

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Admin. Building

Method:

EPA/600/R-93/116

Batch:

B102506

Date Sampled:

10/11/2016

Date Received:

10/13/2016 10/17/2016

Date Analyzed: Date of Report:

10/18/2016

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
01A	Brown	10	0	0	Ó	0	0	0	0	0	0	0	0	90

Description:

Brown Stick Pin Adhesive on Metal Ductwork

Location:

019 - Auditorium

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	itos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	НТО	NON
01B		0	0	0	0	0	0	0	0	Ò	0	0	0	0

Brown Stick Pin Adhesive on Metal Ductwork

Location:

019 - Auditorium

Comments:

Analyzed:

				Asbes	tos%					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
02A	Black	0	0	0	0	0	0	0	0	TR	0	0	0	100

Description: Black Coating on Block Wall behind Plaster

Location:

019 - Auditorium

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
02B	Black	0	0	0	0	0	0	0	0	TR	0	0	0	100

Description:

Black Coating on Block Wall behind Plaster

Location:

019 - Auditorium

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
02C	Black	0	0	0	0	0	0	0	0	TR	TR	0	0	100

Description: Black Coating on Block Wall behind Plaster

Location:

019 - Auditorium

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos:%					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
03A	Yellow	0	0	0	0	0	0	0	0	TR	0	TR	0	100

Yellow Carpet Mastic Description:

Location:

Room 122

Comments:

Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO #:

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Admin. Building

Method:

EPA/600/R-93/116

Batch:

B102506

Date Sampled:

10/11/2016

Date Received: Date Analyzed: 10/13/2016 10/17/2016

Date of Report:

10/18/2016

				Asbes	tos%					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
03B	Yellow	0	0	0	0	0	0	0	0	TR	0	TR	0	100

Description: Yellow Carpet Matic

Location:

Room 122

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	stos %		2817			Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
04A	Tan	0	0	0	0	0	0	0	0	95	0	0	0	5

Description: Tan Cloth Vibration Dampener

Location:

Room 205A Comments:

Is asbestos present? No.

Analyzed: Yes

			776	Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
04B	Tan	0	0	0	0	0	Ò	0	0	95	0	0	0	5

Description: Tan Cloth Vibration Dampener

Location:

Room 126

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	Asbest	os %		7
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
05A	Multi	0	<u> </u>	0	0	0	0	0	0	30	0	0	0	70

Description:

Stone Pattern Linoleum on Counter

Location:

Comments:

is asbestos present? No.

Analyzed: Yes

				Aşbes	itos:%					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
05B	Multi	0	0	0	0	0	0	0	0	30	0	0	0	70

Description: Stone Pattern Linoleum on Counter

Location:

Room 012

Room 012

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	itos %					Non-	Asbest	os %	,	
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
06A	Yellow	0	0	0	0	0	0	0	0	TR	0	0	0	100

Description: Gold Adhesive assoc. w/05A

Location:

Room 012

Comments:

Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO #:

N/A

Client Project #: 01-207319,07.43

Client Reference: 240 Beaver St., Waltham, MA - Admin. Building

Method:

EPA/600/R-93/116

Batch:

B102506

Date Sampled:

10/11/2016 10/13/2016

Date Received: Date Analyzed:

10/17/2016

Date of Report:

10/18/2016

				Asbei	itos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
06B	Yellow	0	0	0	0	0	0	0	0	TR	0	0	0	100

Description: Gold Adhesive assoc. w/05B

Location:

Room 012

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	stos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
07A	Gray	20	0	0	0	0	0	0	0	10	0	0	0	70
						<del></del>							, ,	, ,

Description: Square Pattern Linoleum on Counter

Location:

Room 101

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
07B	<u> </u>	0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Square Pattern Linoleum on Counter

Location:

Room 101

Comments:

Analyzed: No

	-			Asbes	itos %		ar ar			Non	Asbest	os %		-
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
08A	Brown	TR	0	0	0	0	0	0	0	TR	0	0	<u> </u>	100
														100

Description: Brown Adhesive assoc. w/07A

Location:

Room 101

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	stos %					Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL.	HAR	SYN	ОТН	NON
08B	Brown	TR	0	0	0	0	0	0	0	TR	0	0	0	100

Description:

Brown Adhesive assoc. w/07B

Location:

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	itos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
09A	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Black w/White Streaks Counter Sheet Goods

Location:

Room 201

Room 101

Comments:

Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO #:

N/A

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Admin. Building

Method:

EPA/600/R-93/116

Batch:

B102506

Date Sampled:

10/11/2016 10/13/2016

Date Received: Date Analyzed:

10/17/2016

Date of Report:

10/18/2016

		96.50		Asbes	tos %	2000				Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
09B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100
									L					100

Black w/White Streaks Counter Sheet Goods

Location:

Room 201

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
10A	Silver	0	0	0	0	0	0	0	0	TR	0	0	0	100

Silver Adhesive assoc. w/09A

Location:

Room 201

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
10B	Silver	0	0	0	0	0	0	0	0	TR	0	0	0	100
•		<u></u>				<b></b>	L						, ,	100

Description: Silver Adhesive assoc, w/09B

Location:

Room 201

Comments:

Is asbestos present? No.

Analyzed: Yes

			CATALOG AND AND AND AND AND	Asbes	tos %				Ţ	Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
11A	Gray	0	0	0	0	0	0	0	0	95	0	0	0	5
				·					L				, ,	, ,

Description: Gray Soundboard on Wall

Location:

Room 09A

Comments:

Is asbestos present? No.

Analyzed: Yes

			1,000	Asbes	stos %					Non	Asbest	os %	*	
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
12A	Yellow	0	0	0	0	0	0	0	0	TR	0	0	0	100

Description: Cream Adhesive assoc. w/11A

Location:

Room 09A

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
13A	Black	10	0	0	0	0	0	0	0	TR	0	0	0	90

Description:

Black Soundboard Adhesive Room 202

Location: Comments:

Is asbestos present? Yes.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO#:

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Admin. Building

EPA/600/R-93/116

Batch:

B102506

Date Sampled:

10/11/2016 10/13/2016

Date Received:

10/17/2016

Date Analyzed: Date of Report:

10/18/2016

				Asbes	tos ‰					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
13B		0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Black Soundboard Adhesive

Location:

Room 09A (Patch)

Comments:

Non-Asbestos Codes:

Asbestos Codes:

CHR = Chrysotile FBG = Fiborglass

AMO = Amosite MNW = Mineral Wool CRO = Crocidolite CEL = Cellulose

ACT = Actinolite HAR = Hair

TRE = Tremolite SYN = Synthetic

ANT = Anthophyllite

OTH = Other NON = Non-Fibrous Minerals

\* All results are in percentage.

Analyzed:

Note: To create a unique lab sample ID Batch # and the Sample ID (example: [Batch #] - [Sample ID]).

Analyst: Robert

# ProScience Analytical Services, Inc. PLM Asbestos Chain of Custody Record

☐ RUSH

Turn Around Time Requested

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	DI M Achooton Chair of Cuntada December

22 Cumming T:781-935-33	22 Cummings Park, Woburn, MA 01801 T:781-935-3212 F:781-932-4857	rn, MA 01801 4857		☐ Same day ☐ 24 Hour [	☐ 48 Hour (☐ 72 Hour	our 8 5 Days	
Client:	Environme	Environmental Compliance Services, Inc.	Special Instructions:	Relinquished by/date;	2011 S	21/01	311
Address:	588 Silver	MA 01001		Received by/date:	en Toumouro	10/13/69	1700
Project Site: Project #:		240 Beaver St. Waldman Mar 01-207319.07-43 Admin Bola		Samples received:	Analyzed:	d:	Birthichtin
Phone Number:	mber:			Stop on first positive Yes / No	DNO		
Contact:	Eric Kubic	Eric Kubic Ekubic@ecsconsult.com	t/M=Floor Tile & Mastic, Lm=Lin	Ft/M=Floor Tile & Mastic, Lm=Linoleum, Cm=Carpet Mastic, Pib=Plaster Base Coat, Pls=Plaster Skim Coat, Giz=Glaze	Plaster Base Coat, PIs=Plas	ster Skim Coat, Glz=Glaze	<b>,</b>
For Lab Use			Gyp=Gypsum Board, ac≡Joint.co Analyzed by/date: ۖ ﷺ	Gyp=Gypsum Board, Ac=TohitGompound; CT=Ceiling Tiler Ck=Cauk, Adin=Adinesiver Ppg=Paper, Rf=Roofing Analyzed by/date: ////////////////////////////////////	auk, Adh-Adhesiye, PolyPi	aper, Rf=Roofing	10.18/c
	,		Optical	Par /	7	Non Asbestos Percentage (%)	
Sample ID	Date Sampled	Description/Location	% Asbestos  Color  Homogeneity  Texture  Friable  Morphology  Extinction	Sign of Elongation Birefringence Pleochroism  Chrysotile	Amosite Crocidolite Tremoilte Anthophylite Actinolite Fiberglass Mineral Wool	Cellulose  Hair  Synthelic	Non Fibrous
01.7	milita	Description: 13 (Company of the CT CK GIZ (Adh) Ppr Rt Description: 13 (Company of the Price K Price Advance Rt Price K Price Advance Rt Price K Price Advance Rt Price K Pric	) 2 2 7	2			90
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028		Location:	0 50 R 2 1			. E	(CD)
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03.4	2	Location: RM 122				7	l <sub>U</sub>

08A		o ンズ		074		013		06A		0533		05H	) )	в <i>415</i>	i	OYA	•	0313		Sample ID	
$\leftarrow$	/	New York Company																10/11/12		Date Sampled	
<b>~</b> ,	FL/M Lm Cm Plb/Pls Gyp/Jo CT Ck Giz Adh Ppi Rf Description: 場でいい、 みがい なららで いんつきみ	Location: RM 101	Ft/M Lm Cm Plb/Pls Gyp/Jc CT Ck Giz Adh Ppr Rf Description: / ( //	Location: Pin 101	FICM Lm Cm Pito/Pis Gyp / Jo Ci Ck Giz Adh Ppr Rf Description: グロングイク アージナナイク インのファンベ のってのブイナモアー	Location:	FI/M Lm Cm Pib/Pis Gyp/Jc CT Ck Giz Adh Ppr Rf Description: Gでり) みがん べららのにい のまる	Location:	Ft/M Lm Cm Plb/Pls Gyp/Jc CT Ck Giz Adh Ppr Rf Description: らかつ 、なか ごろくっと いく のらみ		Pescription: ינ איף / זכי כני כא Giz Adn Ppr Rt / ר Description: ינ אין	Location: RM 0/7	Description: 3/6me Featfeld LEADEUN ST.	Location: AM 124	Description: {{		HVM Lm Cm Plb/Pls Gyp/Jo CT Ck Giz Adh Ppr Rf Description:アムハー C/oが人 レジル(みようさへ) グェブタバイク		רניאי בחד החירוצ Gyptuc Ci Ck Giz Adn Ppr kt Description: ילע (ל	Description/Location	
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Relinquished By: Cornts: Birefringence L= less than .010, M= .011-.029, H= greater than .03: Microscope Olympus 2, Serial # circle 1- 242277, 229027, 235000, 230663

	BNASOP
-	

	13.13		13.4		anua	17.4	11.A		10%		Va!		5.50		09,9		083		Sample ID	8/
	-																10/11/12		Date Sampled	000
Location:	Location: $P_{VN}$ $P_{A}$ $P_$	PESCRIPTION: 「例のした Sourced まっこり なん)		Description: 3/21/6 Source bosers Ach	Location: RNOSA	Description: CFCon on end to cassor of 1/4	Location: $\mathcal{L}_{M} = \mathcal{O} \mathcal{S} \mathcal{A}$	Pescription:のですからないのは、CK Giz Adh Ppr Ry Description:のつかがからないののであっている!	ocation: R m 20 /	Film Lim His His Gypt Je CT CK Giz Adh Pipr RY Description: らこして Adh Cor エノのでき	ocation: RA 201	Description: 5: 10:1 Act CSS C C/OFA	Location: Rrv Zo /	Ft/M Lm Cm Pib/Pis Gyp/Jc CT Ck Giz Adh Ppr Rf  Description:   (   / (   / i)	Location: $Am = 20 /$	FROM LOT COM PID PID PID SAP Jo CT CK Giz Adh Ppr Rf Description: 「ろんん かん しゃった らずでみんら にのシットせて タトモモト ゆるるぶ	Location: $\mathcal{R}_{\mathcal{M}_{i}}$ ( $_{\mathcal{C}_{i}}$ )	Description: S. Nown ANN ASSECTION OF RE	Description/Location	+10 Deaves Street- Waltham 1
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October 18, 2016

Eric Kubic Environmental Compliance Svcs Inc. HQ 588 Silver Street Agawam, MA 01001

Dear Eric Kubic,

The enclosed analytical results have been obtained by using the EPA/600/R-93/116 method. The "Visual Estimate" quantitative method is generally used for determining the percentage of asbestos and other components of the sample. "The Point Counting" method may also be used upon client request or at the analyst discretion. The Point Count method is usually recommended when the sample contains less than 10% asbestos by Visual estimate. Asbestos content less than 1% is recorded on the report as TR (trace).

The Quality Control data related to the samples analyzed is available upon client's written request. ProScience Analytical Services Inc., assumes no responsibility for potential sample contamination that may have occurred during the sample collection process or erroneous data provided by the client.

The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP.

All Laboratory records are retained for at least three years unless otherwise directed in writing by the client. The actual samples are retained for a period of two months and written request is necessary in order to be retained for a longer period of time. All analytical results and records are considered strictly confidential and will not be released under any circumstances to anyone except the actual client. The analytical results included in this report apply only to the items tested.

If you have any questions please contact the Laboratory Manager or the Laboratory Director.

Sincerely,

Patricia Weakley, Optical Asbestos Manager

Aimee Cormier, Laboratory Director

Enclosure:

Version 2

LAB BATCH ID: B 102507 CLIENT PROJECT ID: 01-207319.07.43

Client Ref: 240 Beaver St., Waltham, MA - Grav Building

AIHA ID# 102754; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056; NVLAP

Lab Code 200090-0; RI ID # AAL-093; VT ID# AL016876

Client Name:

Environmental Compliance Svcs Inc. HQ

PO#:

N/A

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Gray Building

Method:

EPA/600/R-93/116

Batch:

B102507

Date Sampled:

10/6/2016

Date Received:

10/13/2016 10/18/2016

Date Analyzed: Date of Report:

10/18/2016

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
01A	Gray	TR	0	0	0	0	0	0	0	0	0	0	0	100

Description:

Cementitious Coating over Cork

Location:

Sub-Basement Cooler

Comments:

Is asbestos present? Yes.

Analyzed: Yes

					tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
02A	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description:

Cork associated w/01A

Location:

Sub-Basement Cooler

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
03A	Red	0	0	0	0	0	0	0	0	18	0	2	0	80

Description: Red & Black Sheet Flooring

Location:

Room Adjacent to 105

Comments:

Is asbestos present? No.

Analyzed: Yes

			- 04-114	Asbes	tos %					Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
04A	Gray	0	0	0	0	0	0	0	0	75	0	0	0	25

Description:

Gray Vapor Paper associated w/03A

Location:

Room Adjacent to 105

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %	aresteis				Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
05A	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Black/Brown Adhesive associated w/03A

Location:

Room Adjacent to 105

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asber	tos %					Non	Asbest	os %	***************************************	
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
05B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description:

Black/Brown Adhesive associated w/03A

Location:

Room Adjacent to 105

Comments:

Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

?O#:

N/A

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Gray Building

Method:

EPA/600/R-93/116

Batch:

B102507

Date Sampled:

10/6/2016 10/13/2016

Date Received: Date Analyzed:

10/18/2016

Date of Report:

10/18/2016

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
06A	Black	0	0	0	Ó	0	0	0	0	0	0	0	0	100

Description: Black Cork Adhesive on Wall

Location:

Room 202

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
06B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Black Cork Adhesive on Wall

Location:

Room 202

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	-Asbest	os %		
Sample ID	Color	CHR	OMA	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	отн	NON
07A	Black	0	0	0	0	0	0	15	0	0	0	0	0	85

Description: Asphalt Roof Shingle

Location:

Garage Roof

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	itos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
07B	Black	0	0	0	0	0	0	15	0	0	0	0	0	85

Description: Asphalt Roof Shingle

Location:

Garage Roof

Comments:

is asbestos present? No.

Analyzed: Yes

		Asbestos:%							Non-Asbestos %							
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON		
08A	White	TR	0	0	0	0	0	0	0	0	0	0	0	100		

Description:

**Decorative Plaster Ceiling** 

Location:

1st Floor Large Storage Room

Comments:

Is asbestos present? Yes. Analyzed: Yes

		Asbestos:%						Non-Asbestos %							
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON.	
08B	White	TR	0	0	0	0	0	0	0	0	0	0	0	100	

Description: Decorative Plaster Ceiling

Location: Comments: Room 203

Is asbestos present? Yes.

Client Name:

Environmental Compliance Svcs Inc. HQ

Batch:

B102507

PO#:

N/A

Date Sampled: Date Received:

10/6/2016 10/13/2016

Client Reference: 240 Beaver St., Waltham, MA - Gray Building

Client Project #: 01-207319.07.43

Date Analyzed:

10/18/2016

Method:

EPA/600/R-93/116

Date of Report:

10/18/2016

				ASDes	itos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
08C	White	TR	0	0	0	0	0	0	0	0	0	0	0	100

Description: Decorative Plaster Ceiling

Location:

Room 204

Room 105

Comments:

Is asbestos present? Yes.

Analyzed: Yes

		200		Asbes	tos %						Asbest			
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	отн	NON
09A	White	5	0	0	0	0	0	0	0	0	0	0	0	95

Description: White Sink Undercoating

Location: Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos ‰					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
09B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: White Sink Undercoating

Location: Comments: Room 105

Analyzed: No

				Asbes	tos:%					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
10A	Black	3	0	0	0	0	0	0	0	0	0	0	0	97

Description: Black w/White Streaks Counter Sheet Goods

Location:

Room 204

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNM	CEL	HAR	SYN	ОТН	NON
10B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Black w/White Streaks Counter Sheet Goods

Location:

Room 105

Comments:

Analyzed: No

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
11A	Black	0	0	0	0	0	0	0 .	0	0	0	0	0	100

Description: Adhesive associated w/10A

Location:

Room 204

Comments:

Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO#:

N/A

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Gray Building

Method:

EPA/600/R-93/116

Batch:

B102507

Date Sampled:

10/6/2016

Date Received:

10/13/2016 10/18/2016

Date Analyzed: Date of Report:

10/18/2016

		COLUMN TO			tos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
11B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Adhesive associated w/10B

Location:

Room 105

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	отн	NON
12A	Black	3	0	0	0	0	0	0	0	0	0	0	0	97

Description: Ext. WCC

Location:

Garage

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos%	1966				Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
12B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Ext. WCC

Location:

Garage

Comments:

Analyzed: No

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
13A	Brown	0	0	0	0	0	0	0	0	75	0	0	0	25

Description:

Brown Paper under Wood Siding

Location:

Ext. South Side

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %		nie st			Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
13B	Brown	0	0	0	0	0	0	0	0	75	0	0	0	25

Description:

Brown Paper under Wood Siding

Location:

Ext. South Side

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
14A	Tan	0	0	0	0	0	0	0	0	90	0	0	0	10

Description:

Top Layer Tan Paper under Wood Siding

Location: Comments: Ext. West Side

Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO #:

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Gray Building

Method:

EPA/600/R-93/116

Batch:

B102507

Date Sampled:

10/6/2016

Date Received: Date Analyzed:

10/13/2016 10/18/2016

Date of Report:

10/18/2016

				Asbes	tos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNM	CEL	HAR	SYN	ОТН	NON
14B	Tan	0	0	0	0	0	0	0	0	90	0	0	0	10

Description: Top Layer Tan Paper under Wood Siding

Location:

Ext. West Side

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
15A	Black	0	0	0	0	0	0	0	0	75	0	0	0	25

Description: Bottom Layer Thin Black Paper under 14A

Location:

Ext. West Side

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	itos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
15B	Black	0	0	0	0	0	0	0	0	75	0	0	0	25

Description: Bottom Layer Thin Black Paper under 14B

Location:

Ext. West Side

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos-%					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	отн	NON
16A	Black	0	0	0	0	0	0	0	0	75	0	0	0	25

Description: Thick Black Paper under Wood Siding

Location:

North Side - Garage Ext.

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
16B	Black	0	0	0	0	0	0	0	0	75	0	0	0	25

Description: Thick Black Paper under Wood Siding

Location:

North Side - Garage Ext.

Comments:

is asbestos present? No.

Analyzed: Yes

		1100		Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
17Å	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Brown/Black Styrofoam Adhesive Location:

1st Floor Photo Room

Comments: Recommend TEM Analysis. Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO#:

N/A

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver St., Waltham, MA - Gray Building

Method:

EPA/600/R-93/116

Batch:

B102507

Date Sampled:

10/6/2016

Date Received: Date Analyzed:

10/13/2016 10/18/2016

Date of Report:

10/18/2016

					Asbes	tos %					Non	Asbest	os %		
ļ	Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
L	18A	Brown	2	0	0	0	0	0	0	0	0	0	0	0	98
- 1												نـــــــــــــــــــــــــــــــــــــ			

Description: Brown Faux Tile Adhesive behind Sink Splash Guard

Location:

Basement

Comments:

Is asbestos present? Yes.

Analyzed: Yes

				Asbes	tos %			*	-	Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
19A	Tan	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Tan Wall Paneling Adhesive

Location:

1st Floor Small Storage Room

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbe	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
19B	Tan	0	0	0	0	0	0	0	0	0	0	0	0	100

Location:

Description: Tan Wall Paneling Adhesive 1st Floor Small Storage Room

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	stos %					Non-	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
20A	Black	0	0	0	0	0	0	0	0	75	0	0	0	25

Description:

Black Roof Tar Paper

Location:

Main Building

Comments:

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
20B	Black	0	0	0	0	0	0	0	0	75	0	0	0	25

Description:

Black Roof Tar Paper

Location: Comments: Main Building

Is asbestos present? No.

Analyzed: Yes

				Asbe	stos %					Non	-Asbest	os %	-	
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
21A	Beige	0	0	0	0	0	0	0	0	0	0	0	0	100

Location:

Description: 12x12 Beige Floor Tile Large Storage Room 1st Floor

Comments:

Is asbestos present? No.

Client Name:

Environmental Compliance Svcs Inc. HQ

PO #:

N/A

Client Project #: 01-207319.07.43

Method:

Client Reference: 240 Beaver St., Waltham, MA - Gray Building

EPA/600/R-93/116

Batch:

B102507

Date Sampled:

10/6/2016 10/13/2016

Date Received: Date Analyzed:

10/18/2016

Date of Report:

10/18/2016

				Asbes	tos %					Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
22A	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Yellow Floor Tile Mastic associated w/21A

Location:

Large Storage Room 1st Floor

Comments:

Is asbestos present? No.

Analyzed: Yes

Asbestos Codes:

CHR = Chrysotile

AMO = Amosite

CRO = Crocidolite

ACT = Actinolite

TRE = Tremolite

ANT = Anthophyllite

Non-Asbestos Codes:

FBG = Fiberglass

MNW = Mineral Wool Note: To create a unique lab sample ID, use the Batch # and the Sameh CEL = Cellulose

pople: [Batch #] - [Sample ID]).

HAR = Hair

SYN = Synthetic

NON = Non-Fibrous Minerals OTH = Other

\* All results are in percentage.

Analyst: Sophetra Ken

Page 7 of 7

# ProScience Analytical Services, Inc. PLM Asbestos Chain of Custody Record

□ RUSH

			$\vdash$	$\vdash$	L		F			-	F	F	-	E	E				
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<i>,</i> ~	(%)	Non Asbestos Percentage (%)	bestos P	Non As		Asbestos Percentage (%)	Percent	sbestos	$\vdash$	고	$\vdash$	Optical Properties	Optical		Stereo Scope	Ster	010000		
18:16	Calo:	of mag	, Rf=Roc	=Paper	ive, Ppr	Tile, Ck=Caulk, Adh=Adhesive, Ppr=Paper, Rf=Roofing	WK, Ad	(1)-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	ng Tile,	TaCeiling		EL CO		oard, Jo	osum Br ed by/	Gyp=Gypsum Board, Jc=Joint Conpound, CI=Ceiling Analyzed by/date: b Thill Man	A 102507	Batch #,	or Lab Use
	ilaze ,	at, GIZ=G	ikim Co	Yaster S	ť, Pls=P	FVM=Floor Tile & Mastic, Lm=Linoleum, Cm=Carpet Mastic, Plb=Plaster Base Coat, Pls=Plaster Skim Coat, Glz=Glaze	laster t	, PIb=P	t Mastic	=Carpe	,n, Cm	Linoleu	ic, Lm=	& Masti	or Tile	FVM=Flo	Eric Kubic Ekubic@ecsconsult.com	Eric Kul	Contact
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Compressed St. Bi	3	3			\(\sigma\)		3		3	10/6/16
Sirefringence L= less than .010, M= .011029, H= greater than .03: Microscope Olympus F	FIM Lm Cm PIBIPIS GypIJC CT CK GIZ Adh Ppr RY   Description: 浸 / とこと いん かんらそく グライス かんかく していか ナイー らんしきん らのかがら してはでい スペ スライ	Description:  Location:	Description:    FI/M Lm Cin Pib/Pis Gyp/Jc CT Ck Giz Adh Ppr Rf	Description: ( ) Adh Ppr Rf  Location: R M 203	Description: Decement & Flaster Celling  Location: 1st fl 29 stresse & m	Description: 1 \ /(  Location: 1 \ /(	Description: A Gill All Pls Gyp / Jo CT Ck Giz Adh Ppr Rf  Description: A Gill All All All Shirty / E  Location: For cost Rood +	Description:  Location: RM 202		
03: Microscope Oly	314		UN WHE	WH	WA	WH	BK	35	Q By	D Be Y
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Sample ID

Date Sampled

Description/Location

% Asbestos

Color Homogeneily Texture

Friable Morphology Extinction Sign of Elongation Birefringence Pleochroism

Chrysollle ` Amosile Crocidolite Tremolite Anthophylite Actinolite

Fiberglass

Cellulose

Synthetic

Non Fibrous

Other

Hair

Mineral Wool

Ma

r S

50:10

FI/M Lm Cm P15/P15 Gyp/Jo CT Ck Giz Adh Ppr Rf Description: 万たん しばん ほん のん かんり

841 JYA 13A 123 103 Sample 11,9 5A バスな  $\mathcal{C}$ Ħ W 240 Beaver Street-Comments: Birefringence L= less than .010, M= .011-.029, H= greater than .03: Microscope Olympus P' Serial # circle 1- 242277, 229027, 235000, 230563 Sampled Date FIM Lim Cim PIB1PIS GYP116 CT CK GIZ Adh Ppr R Description: Doydram Carret Thin IT lad Tapel O. W. C. 1444 147 Description: / C Description Top Laye Location: / C Ft/M Lm Cm PIb/Pis Opp/Jic CT Ck Glz Adh Ppr R Description: グテカーハ アニタッチ しゅじゃく しゅつかい グミロップ ocation: RI/M Lim Com Pilb/Pis Gyp/Je CT Ck Giz Adh Ppi Location:  $\ell\chi +$  , Ft/M Lm Cm Plb/Pls Gyp/Je CT Ck Glz Adh Ppr Rf Description: FI/M Lm Cm PIB/PIS Gyp/Je CT CK GIZ Adh Ppr Rf Description: Cx+ FI/M Lm Cm Plb/Pls Gyp/Jc ocation: Location: e 2+ Location: Location: 67 1 as y FI/M Lm Cm PIB/PIS Gyp/Jc CT Ck Giz Adh Ppr Rf Location: Description: 17,7/4 FI/M Lm Cm PIB/PIS Gyp/Jc CT CK GIz Addh-Ppr R Location: Rm Description: Ft/M Lm Cm Plb/Pls Gyp/Jc CT Ck Glz Adh Ppr Rf 0300 \_ + x GCC=58 Description/Location South Side ASSAC 144 x 143 155 oc CAS CAS 105 20,00 CI Ck Glz Adh Ppr Ri 7 からかい マスタイ Ck; Glz (Adb. Ppr R 1013 3 Black 7 D Ma Ø ند چرچ % Asbestos Byo BR Bil Color Homogeneity 7 叉 Sing 500 100 Texture 2 N N 10 1 Friable Morphology W. **€** Extinction Sign of Elongation Birefringence 10:09 Pleochroism 123 u Chrysotlle Amosite Crocidolite Tremolile Anthophylite Actinolite Fiberglass Mineral Wool 3 4 this 8 D H.B K UB. 113 6 Cellulose Hair Synthetic Other 70 8 t, 3 9 25 a 0 Non Fibrous

Page \_\_\_

}	214	2013	200	193	190	18.4	17A	1613	16 A	153	Sample ID
* Reco									-	10/6/16	Date Sampled
* Recommend TEM Analysis	Description: Beige 12x12	Description: 1 ( )  Qualtion: 1 ( )  A Com Pib / Pis Gyp / Jc CT Ck Glz Adh Par Ri	Description: Black Road for Page /  Location: Main 13/19.  FI.M Lm Cm P16/P18 Gyp/Je CT CK Glz Adh Par Ri	Gwp/ ic CT	Styl- Sin. Si	I PIS SABITO CI CK CB	्रे रेव	CK GE Adh Ppr	Description: The Bires Bires Pages Judes	Description: / / // // // // // // // // // // // /	Description/Location
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Relinquished By Comments: Birefringence L= less than .010, M= .011-.029, H= greater than .03: Microscope Olympus Compus Serial # circle 1- 242277, 229027, 235000, 230663 Date:\_ Page\_\_

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k.l



October 31, 2016

Eric Kubic ATC Group Services LLC - Agawam 588 Silver Street Agawam, MA 01001

Dear Eric Kubic,

The enclosed analytical results have been obtained by using the EPA/600/R-93/116 method. The "Visual Estimate" quantitative method is generally used for determining the percentage of asbestos and other components of the sample. "The Point Counting" method may also be used upon client request or at the analyst discretion. The Point Count method is usually recommended when the sample contains less than 10% asbestos by Visual estimate. Asbestos content less than 1% is recorded on the report as TR (trace).

The Quality Control data related to the samples analyzed is available upon client's written request. ProScience Analytical Services Inc., assumes no responsibility for potential sample contamination that may have occurred during the sample collection process or erroneous data provided by the client.

The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP.

All Laboratory records are retained for at least three years unless otherwise directed in writing by the client. The actual samples are retained for a period of two months and written request is necessary in order to be retained for a longer period of time. All analytical results and records are considered strictly confidential and will not be released under any circumstances to anyone except the actual client. The analytical results included in this report apply only to the items tested.

If you have any questions please contact the Laboratory Manager or the Laboratory Director.

Sincerely,

Patricia Weakley, Optical Asbestos Manager

Aimee Cormier, Laboratory Director

Enclosure:

Version 2

LAB BATCH ID: B 102708 CLIENT PROJECT ID: 01-207319.07.43

Client Ref: 240 Beaver Street, Waltham, MA

AIHA ID# 102754; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056; NVLAP

Lab Code 200090-0; RI ID # AAL-093; VT ID# AL016876

Client Name:

ATC Group Services LLC - Agawam

PO#:

Client Project #: 01-207319.07.43

Client Reference: 240 Beaver Street, Waltham, MA

Method:

EPA/600/R-93/116

Batch:

B102708

Date Sampled:

10/6/2016

Date Received:

10/31/2016 10/31/2016

Date Analyzed: Date of Report:

10/31/2016

				Asbes	stos_%	17000	ar in			Non	Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
PS-01A	White	0	0	0	0	0	0	15	0	TR	0	0	0	85

Description:

Joint Compound

Location: Comments: Wall - Pesticide Shed

Is asbestos present? No.

Analyzed: Yes

				Asbes	tos %					Non-	Asbest	os %		
Sample ID	Color	CHR	OMA	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
PS-01B	White	0	0	0	0	0	0	15	0	TR	0	0	0	85

Description:

Joint Compound

Location: Comments: Ceiling - Pesticide Shed

Is asbestos present? No.

Analyzed: Yes

		CLASS	i editor	Asbes	stos %		<b>海道</b> 蘭			Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	ОТН	NON
PS-02A	White	0	0	0	0	0	0	0	0	2	0	0	0	98

Description: Gypsum

Location:

Wall - Pesticide Shed

Comments:

Is asbestos present? No.

Analyzed: Yes

		145		Asbes	stos %∹			i e		Non	-Asbest	os %		
Sample ID	Color	CHR	OMA	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
PS-03A	Black	0	0	0	0	0	0	0	0	40	0	0	0	60

Description:

Asphalt Roof Shingle

Location:

Pesticide Shed

Comments:

Is asbestos present? No.

Analyzed: Yes

		THE RESIDENCE		Asbes	stos %					Non-	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
BH-01A	Brown	0	0	0	0	0	0	0	0	60	0	0	0	40

Description: Black Wrap on F/G Pipe in Pipe Chase

Location:

**Boiler House** 

Comments:

Is asbestos present? No.

Analyzed: Yes

·				Asbes	tos %		e Participan			Non	-Asbest	os %		
Sample ID	Color	CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
BH-01B	Brown	0	0	0	0	0	0	0	0	60	0	0	0	40

Description:

Black Wrap on F/G Pipe in Pipe Chase

Location:

Boiler House

Comments:

Is asbestos present? No.

Analyzed: Yes

Asbestos Codes:

CHR = Chrysotile

AMO = Amosite

CRO = Crocidolite

ACT = Actinolite

TRE = Tremolite

ANT = Anthophyllite

Non-Asbestos Codes:

FBG = Fiberglass

Note: To create a unique lab sample ID, use the Batch # a

MNW = Mineral Wool

OEL = Cellulose

nple: [Batch #] - [Sample ID]).

HAR = Hair SYN = Synthetic OTH = Other NON = Non-Fibrous Minerals

\* All results are in percentage.

Analyst: Sophetra Ken

# ProScience Analytical Service

7

PLM As	1 Asbestos	<sup>2</sup> LM Asbestos Chain of Custody Record	☐ RUSH  Turn Around Time Requested	
ABORAT 2 Cumming	ABORATORY/HEADQUARTEF 2 Cummings Park, Woburn, MA 01801	ABORATORY/HEADQUARTERS 2 Cummings Park, Woburn, MA 01801		
:781-935-32	:781-935-3212 F:781-932-4857	4857	Same day   24 Hour   48 Hour   72 Hour   5 Days	
lient:	ATC Associates	ciates	Special Instructions: Relinquished by/date:	-
\ddress:	588 Silver	588 Silver Street, Agawam, MA 01001		=======================================
roject Site:		240 Beaver Street Wollham Ma	Analyzed:	1 July 19
roject #:		1.07.43	Faxed(E-mailed, Verbal by/date:	8
hone Number:	nber:	(413) 386-4774	Stop on first positive (Yes ) No	
ontact:	Eric Kubic	Ekubic@ecsconsult.com	er Base Coat, Pis-	
or Lab Use		RINATION	Gyp=Gypsum Board, Jo=Jgint Cympaund, CII=Geriing Tile, Cy=Caulik, Adh=Adhastve, Ppy=Papes, Rif-Rodfing / Analyzed by/date: Joy III / / / / / / / / / / / / / / / / /	
Canala			Diffical Properties N. Asbestos Percentage (%)	1
Sample ID	Date Sampled	Description/Location	% Asbest Color Homogeneity Texture Friable Morphology Extinction Siga of Elongat Birefringence Pleochroism  Chrysotile Amosite Crocidolite Tremolite Actinolite Fiberglass Mineral Wool Cellulose Hair Synthetic Other	Non Fibrous
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74-014		Location: Boiler House	8	RO
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APPENDIX D



#### HERE BUSINESS AND THE ENVIRONMENT CONVERGE

588 Silver Street, Agawam, MA 01001 tel 413.789.3530 fax 413.789.2776 www.ecsconsult.com

Mr. James Morrissey Senior Architect Facilities and Campus Planning Division University of Massachusetts – Amherst 360 Campus Center Way Amherst, MA 01003 August 14, 2009 Project No. 01-207783.00 Document No. 38075

RE:

Limited Asbestos and Lead Paint Inspection Waltham Research Station Main Barn, Calf Barn and Garage University of Massachusetts

#### Dear Jim:

As per your request, Environmental Compliance Services, Inc. (ECS) has completed a limited inspection of building materials for the presence of asbestos-containing materials (ACMs) and lead containing paint (LCP). Materials inspected were from the proposed renovation areas as defined in WR # 06-000809.

On July 7, 2009 ECS personnel collected a total of 4 bulk samples of various suspect roofing materials for asbestos determination. These materials were deemed homogenous with other building materials located in the areas of the proposed renovations.

Laboratory test results DID INDICATE THE PRESENCE OF ASBESTOS.

The inspection sample locations and findings are detailed on the tables below. The sampling inspection forms and laboratory data sheets are enclosed with this letter.

## SUSPECT MATERIALS WITH ASBESTOS DETECTED WALTHAM RESEARCH STATION MAIN BARN, CALF BARN AND GARAGE UNIVERSITY OF MASSACHUSETTS

Functional	Material	Sample
Space (s)	Description	Number
Waltham Research Station; Calf Barn	Square transite roof shingles	WA-3

Project No. 01-207783.00 Document No. 38075 Mr. James Morrissey University of Massachusetts - Amherst August 14, 2009

Page 2

# SUSPECT MATERIALS WITH NO ASBESTOS DETECTED WALTHAM RESEARCH STATION MAIN BARN, CALF BARN AND GARAGE UNIVERSITY OF MASSACHUSETTS

Functional Space (s)	Material Description	Sample Number
Waltham Research Station; Garage	Roofing Material (shingles and paper barrier), form the area of large hole in the roof	WA-1
Waltham Research Station; Main Barn	Roofing Material (shingles and paper barrier), collected from the ground underneath the large hole in the roof	WA-2
Waltham Research Station; Calf Barn	Black roofing barrier found on the ground under large collapsed roof area	WA-4

On July 7, 2009 ECS personnel collected a total of 10 bulk sample of paint for total lead determination. These materials were also deemed homogenous with other building materials located in the area of the proposed renovation. Exact sample locations are detailed on the table below and the sampling inspection forms. The laboratory data sheets are enclosed with this letter. Laboratory test results DID INDICATE THE PRESENCE OF LEAD above method detection limits. All samples were submitted to ProScience Analytical Services an accredited laboratory for asbestos and lead determination.

### LEAD ANALYSIS RESULTS WALTHAM RESEARCH STATION MAIN BARN, CALF BARN AND GARAGE UNIVERSITY OF MASSACHUSETTS

Building	Description	Sample ID	Substrate and location	Result (% weight)
Waltham Research Station; Garage	White Paint	W-1	Wood trim around doors and windows	6.84
Waltham Research Station; Main Barn	White/Tan Paint	W-2	Large wood door frame	25.79
Waltham Research Station; Main Barn	Green Paint	W-3	Front entrance sliding door	10.24
Waltham Research Station; Main Barn	White Paint	W-9	Wood trim around basement side door frames	36.24
Waltham Research Station; Main Barn	Brown Paint	W-10	Exterior wood siding shingles	0.07
Waltham Research Station; Calf Barn	Green Paint	W-4	Wood window and door frame trim	23.93
Waltham Research Station; Calf Barn	White Paint	W-5	Interior wood window frame trim	0.22
Waltham Research Station; Calf Barn	Orange Paint	W-6	Entrance door	0.02
Waltham Research Station; Calf Barn	Brown Paint	W-7	Interior wood window frame trim	0.57
Waltham Research Station; Calf Barn	White Paint	W-8	Exterior building walls	32.15

Project No. 01-207783.00 Document No. 38075 Mr. James Morrissey University of Massachusetts - Amherst August 14, 2009

Page 3

If you have any questions pertaining to this matter, please do not hesitate to contact our office.

istopher h Hodgrey (AB

Sincerely,

ENVIRONMENTAL COMPLIANCE SERVICES, INC.

Michael Grover

Compliance Technician

Asbestos Inspector #AI000201

Christopher L. Godfrey Senior Project Manager

MG/CLG/kab Attachments

# ProScience Analytical Services, Inc. PLM Asbestos Chain of Custody Record

**LABORATORY/HEADQUARTERS** 

683 North Mountain Rd., Newington, CT 06111 LABORATORY SERVICES 22 Cummings Park, Woburn, MA 01801

T:781-935-3212 F:781-932-4857

T:860-953-1022 F:860-953-1030

Environmental Compliance Services, ECS Client:

588 Silver Street, Agawam, MA. 01001 Address:

413-789-3530 / 413-789-2776 Phone / FAX Number:

/U-Mass Amherst しは / + ham 01-212473.00. Project Site/Project Job Number:

Work Requst # 06 -809 Chris Godfrey / Mike Grover Cóntact:

RUSH  Turn Around Time Requested

□72 Hour □ 4-5 Days Same day | 24 Hour | 48 Hour JZJ.

Relinquished by/date: Samples received: Received by/date:

Faxed, E-malied, Verbal by/date:

Stop on first positive: Yes

00

QC by/date.

Analyzed by/date

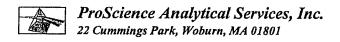
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Sample Description Key: FtMastic≂Floor tile and Mastic, Lm=Linloeum, Cm=Carpet mastic, Cvmm=Covemolding mastic, Pls≂Plaster skim, Plb=Plaster base, Sh=Sheetrock, Jc=Joint Compound, PI=Pipe insulation, Ct=Ceiling tile, Ck=Caulking, Glz=Glazing, Gdb=Glue daub

Rm/Location:

Floor:

Comments:



Telephone: 781-935-3212 Facsimile: 781-932-4857

Email: chemistry@proscience.net

#### Laboratory Report

Contact:

Chris Godfrey ECS, Incorporated

Client: Address:

588 Silver Street

Agawam, MA 01001

Batch #: C 256837

Date received: 8/10/2009 Date analyzed: 8/10/2009

Date of report: 8/10/2009

Project # 01-207783

P.O.# n/a

Project Site: UMASS Watham

WR

#### Lead Analysis In Paint Using SW846-7420/3051

Results in weight percent on an "as received" wet weight basis All results are accurate to no more than three significant figures.

Unless otherwise indicated, all the quality control criteria for the method above have been met

		Sample			Detection	
Lab ID	Client ID	date	Description	Result	Limit	Comments
			White Paint On Wood Trim Around Doors			
C 341029	W-1	8/7/09	& Windows, Garage	6.84	0.01	
C 341030	W-2	8/7/09	White/Tan- Large Door Frame Paint, Mian Barn	25.79	0.01	
C 341031	W-3	8/7/09	Green-Entrance Door Paint, Main Barn	10.24	0.02	
C 341032	W-4	8/7/09	Green Window & Door Frame Paint, Calf Barn	23.93	0.02	
C 341033	W-5	8/7/09	White-Interior Window Frame Trim Paint, Calf Barn	0.22	0.01	
C 341034	W-6	8/7/09	Orange Entrance Door Paint, Calf Barn	0.02	0.01	
C 341035	W-7	8/7/09	Brown-Interior Window Frame Trim Paint, Calf Barn	0.57	0.01	
C 341036	W-8	8/7/09	White-Exterior Wall Paint, Calf Barn	32.15	0.01	
C 341037	<b>W</b> -9	8/7/09	White Trim Paint On Basement Door Fram Main Barn	36.24	0.01	
C 341038	W-10	8/7/09	Brown-Exterior Siding Shingles, Main Barn	0.07	0.01	

BDL - Below Detection Limit

Dan Pine, Chemistry Analyst

Stephen Chace, Chemistry Laboratory Manager

Adrian Stanca, Laboratory Director

Page

1

of

1

Turn Around Time Requested	Next Day	Elament		Cd Cr As	Se Ag Ba Hg	Unar (please specify)	FOR LARDBATTORY LIST ONLY	Wiped area ANALYSIS   Inch Area Weight AA AA   Inch Area Weight AA Browning   Inch Area Weight AA BECILIT	754	30	3/	75	\$	25	3	35	37	800	Time: \$:55	
Rush/<6 Hours	Same Day	EC SIGNE	ANALYSIS (Column 4)	DUST	Sol	TSP WATER W		Air Sempling Information Start End Start End Volume Trina Thina Enwards Financial (filterer)											Date: 5/7/03 8-1000	s please visit us at www.proscience.net
S	ADQUARTERS CONSULTING SERVICES oburn, MA 01801 683 North Mountain Rd., Newington, CT 06111 1380-932-4857 T.860-953-1022 F: 860-953-1030	Environmental Compliance Services	— 588 Silver Street	Agawam State/Zip_MAJ 01001	UMASS Amherst Number 0 - 30	- (1)	Chris Godfrey/ Mike GROVER FAX 413-788-3330 FAX 413-788-3776 AlvPager	Sample Description/Location	٧		GREEN - Entrance Door Paint.	Gillen WINDOW & DOOR - Cast Mank Thin Paint	White Interior Window Scalf Fram Trum Paint	Otherse Enthance Door ->	Cultural	3	White Min Parat on Basement Door Frans 7 Mails	Brown Sxtengar Slding Shireles.	Mater	ver 4.7 For complete information about our services and locations please visit us at www.proscience.net or call the numbers above.
ProScience Chemistry Ch	LABORATORY/HEADQUARTERS 22 Cunmings Park, Woburn, MA 01801 T:781-935-3212 F:781-932-4857		Address: Street	Town	Project Site Line 1	Line 2	Contact: Chris God	Date Field I.D.	3	Ø -M	W-3	/n - m	5-M	10 - C	(L-13)	8-3	M-9	5/1/09 W-10	Relinquished By: Received By: Comments:	ver 4.7 For complete in

APPENDIX E

#### **UMassAmherst**

#### **Environmental Health & Safety**

January 14, 2018

Waltham Station - Lead Paint Sampling

On 1-12-18 Doug Montminy completed Lead Determination sampling throughout the Administration building at Waltham Station by XRF (X-Ray Florescent) analysis. The lead determination table is below with the results.

### LEAD ANALYSIS RESULTS WALTHAM STATION UNIVERSITY OF MASSACHUSETTS, AMHERST, MASSACHUSETTS

Description	Substrate	Location	Sample ID	Result (% weight) XRF (by Volume action Level 1.0)
Beige Paint	Metal Window Frame	Admin Bldg. Exterior South Side	1	XRF 1.3
Beige Paint	Metal Window Sash	Admin Bldg. Exterior South Side	2	XRF 0.4
Beige Paint	Metal Window Header	Admin Bldg. Exterior South Side	3	XRF 4.2
Black Paint	Metal Stair hand Rail	Admin Bldg. Exterior South Side	4	XRF 3.9
Black Paint	Metal Stair Stringer	Admin Bldg. Exterior South Side	5	XRF 5.9
Red Paint	Metal Door Header	Admin Bldg. Exterior South Side	6	XRF 4.9
White Paint	Wood Door Frame	Admin Bldg. Exterior South Side	7	XRF 0.0
Red Paint	Metal Door	Admin Bldg. Exterior South Side	8	XRF 0.0
Beige Paint	Metal Window Frame	Admin Bldg. Exterior South Side	9	XRF 0.8
Red Paint	Wood Wall	Admin Bldg. Exterior South Side	10	XRF 0.0
Red Paint	Wood Double Door	Admin Bldg. Exterior South Side	11	XRF 0.5
Beige Paint	Metal Window Sash	Admin Bldg. Exterior West Side	12	XRF 1.3
Beige Paint	Metal Window Frame	Admin Bldg. Exterior West Side	13	XRF 1.7

, 500	Description	Substrate	Location	Sample ID	Result (% weight) XRF (by Volume action Level 1.0)
	Red Paint	Wood Double Door Frame	Admin Bldg. Exterior West Side	14	XRF 6.4
	Red Paint	Wood Double Door	Admin Bldg. Exterior West Side	15	XRF 8.1
	Beige Paint	Metal 1'x3' Window Frame	Admin Bldg. Exterior North Side	16	XRF 1.6
	Beige Paint	Metal 1'x3' Window Sash	Admin Bldg. Exterior North Side	17	XRF 1.8
	Beige Paint	Metal 1'x3' Window Header	Admin Bldg. Exterior North Side	18	XRF 3.6
	Red Paint	Wood Double Door Frame	Admin Bldg. Exterior East Side	19	XRF 12.3
	Red Paint	Wood Double Door	Admin Bldg. Exterior East Side	20	XRF 7.8
	Beige Paint	Metal Door Frame	Admin Bldg. Ground Floor Room 6	21	XRF 0.16
	Beige Paint	Metal Door	Admin Bldg. Ground Floor Room 6	22	XRF 0.15
	Tan Paint	Block Wall	Admin Bldg. Ground Floor Room 6	23	XRF 0.11
	White Paint	Concrete Ceiling	Admin Bldg. Ground Floor Room 6	24	XRF 0.01
	White Paint	Metal Pipe	Admin Bldg. Ground Floor Room 6	25	XRF 0.02
	Beige Paint	Metal Window Frame	Admin Bldg. Ground Floor Room 6	26	XRF 1.8
	Beige Paint	Metal Window Sash	Admin Bldg. Ground Floor Room 6	27	XRF 1.7
	Beige Paint	Beige Concrete Wall	Admin Bldg. Ground Floor Room 6	28	XRF 0.18
	Beige Paint	Metal Door	Admin Bldg. Ground Floor Room 7	29	XRF 0.16
	Beige Paint	Metal Door Frame	Admin Bldg. Ground Floor Room 7	30	XRF 0.3
	Red Paint	Concrete Cove Base	Admin Bldg. Ground Floor Room 7	31	XRF 1.19
	Beige Paint	Concrete Floor	Admin Bldg. Ground Floor Room 7	32	XRF 0.01
	Beige Paint	Wood Double Door Frame	Admin Bldg. Ground Floor Main Hall	33	XRF 0.12
	Beige Paint	Metal Double Door	Admin Bldg. Ground Floor Main Hall	34	XRF 1.2
	Beige Paint	Metal Upper Door Transom	Admin Bldg. Ground Floor Main Hall	35	XRF 1.15
	Black Paint	Block Wall	Admin Bldg. Ground Floor Main Hall	36	XRF 0.05
	Beige Paint	Concrete Cove Base	Admin Bldg. Ground Floor Main Hall	37	XRF 0.04

Description	Substrate	Location	Sample ID	Result (% weight) XRF (by Volume action Level 1.0)
Beige Paint	Metal Heater Cover	Admin Bldg. Ground Floor Main Hall	38	XRF 0.15
Red Paint	Concrete Floor	Admin Bldg. Ground Floor Main Hall	39	XRF 0.0
Black Paint	Concrete Stair Kick Plate	Admin Bldg. Ground Floor Main Hall	40	XRF 1.0
Black Paint	Metal Newel Post	Admin Bldg. Ground Floor Main Hall	41	XRF 1.7
Black Paint	Metal Hand Rail	Admin Bldg. Ground Floor Main Hall	42	XRF 3.6
Beige Paint	Metal Door Frame	Admin Bldg. Ground Floor Room 9A	43	XRF 0.27
Stain	Wood Door	Admin Bldg. Ground Floor Room 9A	44	XRF 0.0
White Paint	Block Wall	Admin Bldg. Ground Floor Room 9A	45	XRF 0.12
Red Paint	Concrete Floor	Admin Bldg. Ground Floor Room 9A	46	XRF 0.0
Red Paint	Red Metal Floor Plate	Admin Bldg. Ground Floor Room 9A	47	XRF 0.1
Black Paint	Metal Window Frame	Admin Bldg. Ground Floor Room 9A	48	XRF 1.5
Beige Paint	Metal Window Sash	Admin Bldg. Ground Floor Room 9A	49	XRF 2.6
Beige Paint	Concrete Header	Admin Bldg. Ground Floor Room 9A	50	XRF 0.1
White Paint	Concrete Ceiling	Admin Bldg. Ground Floor Room 9A	51	XRF 0.0
Stain	Metal Door Frame	Admin Bldg. Ground Floor Room 9A	52	XRF 0.12
White Paint	Wood Door	Admin Bldg. Ground Floor Room 9A	53	XRF 0.1
Beige Paint	Block Wall	Admin Bldg. Ground Floor Room 9A	54	XRF 0.14
Beige Paint	Concrete Cove Base	Admin Bldg. Ground Floor Room 9A	55	XRF 1.0
Beige Paint	Metal 1'x3' Window Frame	Admin Bldg. Ground Floor Room 9A	56	XRF 3.6
Beige Paint	Metal Door Frame	Admin Bldg. Ground Floor Large Common Room West End	57	XRF 1.2
Beige Paint	Metal Double Door	Admin Bldg. Ground Floor Large Common Room West End	58	XRF 1.3
Beige Paint	Metal Door Window Mullions	Admin Bldg. Ground Floor Large Common Room West End	59	XRF 1.3

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#### PHASE II LIMITED SUBSURFACE INVESTIGATION

City of Waltham 225-227 & 240 Beaver Street Waltham, MA

#### Prepared for

City of Waltham 119 School Street Waltham, MA 02451

July 2019

CDW Project # 1830.0



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#### **FIGURES**

Figure 1:

Site Location Map

Figure 2:

225-227 Beaver Street Site Plan with Boring Locations

Figure 3:

240 Beaver Street Site Plan with Monitoring Well and Groundwater Flow

Direction

#### **TABLES**

Table 1:

Soil Analytical Results

Table 2:

Groundwater Analytical Results

#### APPENDICES

Appendix A: Soil Boring Logs

Appendix B: Soil Laboratory Analytical Report

Appendix C: Groundwater Laboratory Analytical Report



#### 1.0 INTRODUCTION

CDW Consultants, Inc. (CDW), on behalf of our client, City of Waltham, has conducted a limited subsurface investigation on the Site which is located at 225-227 and 240 Beaver Street, Waltham, Massachusetts (Figure 1). The investigation included the advancement of soil borings, soil sampling and analysis, installation of three monitoring wells and groundwater sampling and analysis. This investigation was conducted to evaluate the presence or likely presence of hazardous substances or petroleum products on the property in areas of concern identified in CDW's Phase I Environmental Site Assessment report (Final report dated July 2019).

#### 1.1 Purpose

The purpose of the investigation was to evaluate subsurface conditions in specific areas that, through historic operations, may have been impacted by identified potential sources of contamination at the Site. This investigation was performed in accordance with Massachusetts General Law (MGL) Chapter 21E.

#### 1.2 Site & Surrounding Area Description

CDW conducted an ASTM Phase I investigation of the properties listed as 240 Beaver Street and 225-227 Beaver Street, in Waltham, Massachusetts (the "Site"; Figure 1). The assessment includes one 27.9-acre parcel located at 240 Beaver Street and one 30.84-acre parcel located at 225-227 Beaver Street. Both properties comprise the University of Massachusetts Agriculture Experiment Station that was gifted to the Commonwealth in the early 1900s for educational purposes.

The southern parcel (referenced as Parcel #1) is located at 240 Beaver Street and is improved with a 7,474 square foot administration building built in 1948. The three-story building has approximately 20 offices and an attached auditorium of approximately 5,000 square feet. It is currently used for office space and is known as the main building of the Waltham Experiment Station. The parcel also contains the Gray Workshop Building with four attached greenhouses, a Boiler Building that formerly generated heat for the buildings, the Corn Laboratory with two attached greenhouses, and hoop-style greenhouses. The Administration Building, Gray Workshop Building and the Boiler Building are the main structures currently in use. The parcel is bordered by the Cornelia Warren Ball Fields to the east, Waverly Oaks Road-Route 60 to the south and a residential neighborhood to the west. Access to Parcel 1 is via three gravel driveways that enter the site from Beaver Street. Two driveways provide access and parking along the east, west, and south side of the administration building and the other provides access along the eastern side of the Gray Workshop Building with parking on the south side of the building.

The Parcel 1 buildings are connected to municipal water, sewer and natural gas. The Administration Building was formerly heated with #2 fuel oil, supplied by two 7,500-gallon underground storage tanks (USTs), which were reportedly removed. The Gray Building was formerly heated with #2 fuel oil, supplied by one 1,000-gallon UST that was removed in 1992.



Parcel 2 (225-227 Beaver Street) consists of an abandoned farmhouse and dairy farm buildings including barns, storage sheds, and foundation structures for former buildings. Most of these structures are in disrepair and several have collapsed. The upland field west of the wetland was used for hay production and grazing. The northern portion of this parcel contains approximately 16 acres of wetlands, meadow and succession forest vegetation. The wet meadow and wetland areas were not developed. The parcel is bounded to the north by the Fernald State School, to the south by Waverly Oaks Road and Beaver Street, to the west by Camp Cedar Hill and associated buildings owned by the Girl Scouts of Eastern Massachusetts, and to the east by Waverly Oaks Road. The wetlands contain an approximately 4,600 square feet area of fly ash material brought from an off-site source used for an agricultural research experiment conducted in the 1970's known as the Phoenix Project (a joint USEPA, Mass DEP and City of Waltham DPW project).

According to a July 2016 Periodic Review Class C1 Response Action Outcome by Ramboll Environ, the UMASS experimental station disposed of approximately 66 to 77 tons of municipal incinerator ash residue on Parcel 2 during the summer of 1977. No buildings were known to have been constructed on or near the ash disposal site. The upland field west of the disposal site was used for hay production and/or grazing of cows. The wet meadow was never developed.

The Site is located on the Boston Southwest United States Geological Survey (USGS) 1987 Quadrangle Map at the following approximate location and elevation:

Southe	rn Parcel 1
	ator (UTM) Zone 19 Coordinates
317708.01	UTM E (Meters)
4694755.68	UTM N (Meters)
Latitud	le/Longitude
42.383709°	Latitude (North)
-71.214428°	Longitude (West)
El	evation
58	Feet above sea level
Northe	rn Parcel 2
Universal Transverse Merca	ator (UTM) Zone 19 Coordinates
318032.00	UTM E (Meters)
4694878.00	UTM N (Meters)
Latitud	le/Longitude
42.384886°	Latitude (North)
-71.210534°	Longitude (West)
El	evation
58-48	Feet above sea level



#### 2.0 SUMMARY OF PHASE I SITE ASSESSMENT

CDW completed a Phase I Environmental Site Assessment in July 2019. The investigation conducted by CDW personnel included a review of available federal, state, and local environmental agency records to identify the presence or likely presence of Recognized Environmental Conditions (RECs), Historical Recognized Environmental Condition (HRECs) and Controlled Recognized Environmental Condition (CRECs). No CRECs were identified during the assessment. RECs and HRECs were identified during the assessment. They were:

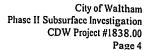
The following HRECs and areas of concern were identified during the assessment:

- An HREC was identified on the southern Parcel 1 located at 240 Beaver Street where a portion of the parcel is listed as a Massachusetts Waste Disposal Site that has been assigned Release Tracking Number 3-28048 for a release of oil. A Class B-1 RAO was submitted to the Massachusetts Department of Environmental Protection (MassDEP) on October 5, 2009 as assessments of the release have demonstrated that No Significant Risk exists as a result of the release and therefore site closure has been achieved.
- An HREC was identified on the southern Parcel 1 located at 240 Beaver Street where a
  portion of the parcel is listed as a Massachusetts Waste Disposal Site that has been assigned
  Release Tracking Number 3-28050 for a release condition of heavy metals in soil. A Class
  A-1 RAO was submitted to MassDEP on October 11, 2009 after soil remediation was
  completed, demonstrating that No Significant Risk exists as a result of the release and
  therefore site closure has been achieved.
- Parcel 1 (240 Beaver Street) was the site of an upland fly ash research area, and Parcel 2 (225-227 Beaver Street) was the site of a wetlands fly ash research area.
- According to the maintenance foreman for Parcel 1, arsenic based pesticides and herbicides had been stored on-site, and used in the past inside the greenhouses.
- The area in the vicinity of the former 1,000-gallon gasoline UST was reported to have had a release of 196 gallons of gasoline and was removed in 1992.

#### 3.0 LIMITED SUBSURFACE INVESTIGATION

#### 3.1 Topography and Hydrogeologic Features

The Site is located between 48 and 58 feet above sea level, and the topography is generally hilly. According to the USGS geological map the bedrock at the Site consists of diorite and gabbro (Zdigb) (Zen et. al. 1983). The Salem Gabbro-Diorite is described as a Proterzoic mafic plutonic rock that retains its igneous texture with some feldspars and mafic minerals altered to chlorite and epidote. There were no bedrock outcrops observed at the Site.





There are no known drinking water source areas or private well supplies within 500 feet of the Site. The Site is not located within a Potentially Productive Aquifer and no community or known non-community drinking water supply, or MassDEP-approved or interim wellhead protection areas, exist within one mile of the Site.

Federal Emergency Management Agency Flood Insurance Rate Maps indicate that the wet meadow wetland basin is located in a Zone A2 floodplain, which is defined as an area within the 100-year flood zone where base flood elevations and flood hazard factors have been determined. The periphery of this area is designated as a Zone B floodplain, which is defined as an area between the 100 year and the 500-year flood limits. The remainder of southern parcel is located in Zone C floodplain which is outside of the 500-year flood limit.

#### 3.2 Soil Borings and Monitoring Wells

On May 28 and 29, 2019, CDW advanced nine (9) soil borings GP1-1 to GP1-9) at 240 Beaver St and GP2-1 to GP2-4 at 225 to 227 Beaver Street, respectively. The soil borings were advanced track mounted Geoprobe equipped with 5-foot long 2-inch diameter large bore sampling tubes. Soil samples were collected continuously in 5-foot acetate sleeves inserted into large bore sampler to depths ranging from 20 feet at 240 Beaver Street to 5 feet at 225-227 Beaver Street. All soil samples were classified on-site. CDW's subcontractor, Crawford Drilling of Westminster, MA completed the advancement of the soil borings. Soil boring logs are included in Appendix A. CDW's subcontractor, Contest Laboratories, Inc. of East Longmeadow, Massachusetts, completed the laboratory sample analyses.

The selection of the locations of the borings was based upon the potential source of contamination at the Site.

#### 240 Beaver Street

- GP1-1 was in the area of the two former 7,500-gallon #2 heating oil USTs.
- GP1-2 was in the area of an existing pesticides storage shed.
- GP1-3 was in the area of the former 196-gallon gasoline release from a former 1,000-gallon gasoline UST.
- GP1-4 was located by a storage area containing tractors and other power equipment.
- GP1-5 and 6 were in the vicinity of the former "fly ash" experimental test area.
- GP1-7 and 8 were in the southern dumpsite closest to Waverly Oaks Road.
- GP1-9 was in the area of a former gasoline UST to the north of greenhouse #3.

#### 225-227 Beaver Street

• GP2-1 was located to the north, in front of the residential house to address possible petroleum related concerns related to heating oil AST piping observed penetrating the front of the house in two locations.



- GP2-2 was in the vicinity of the former silos to the north of the house.
- GP3-3 was in the vicinity of the former calf barn.

#### 240 Beaver Street

A two-inch diameter monitoring well was installed to a depth of 20 feet in borings GP1-3, GP1-5, and GP1-7. The wells were constructed of a 10-foot length of two-inch diameter 0.010 slotted polyvinyl chloride (PVC) well screen threaded to solid PVC riser. Uniformly graded sand was placed around the well screen up to one foot above the screen. One foot of bentonite grout was placed above the sand, followed by native fill to grade. A protective roadway box was installed at grade. The boring/groundwater monitoring well locations are depicted on Figure 2.

#### 225-227 Beaver Street

No monitoring wells were installed at the various boring locations. Refusal on possible bedrock above the water table was encountered at all boring locations. Refusal was encountered between 8 and 10 feet in all boring locations.

#### 3.3 Soil Screening and Laboratory Samples

Soil samples were collected continuously from samples from each boring and field-screened with a photoionization detector (PID) using the headspace method. The soil headspace screening results are provided on the boring logs in Appendix A. The PID is an instrument used to quantify total organic volatiles (TOVs) that ionized at or below 10.6 electron volts (a range which includes gasoline and some fuel oil organics). The detection limit for the instrument is 0.1 parts per million (ppm). One soil sample from each of nine (9) borings at 240 Beaver Street and three (3) borings at 225-227 Beaver Street was selected and submitted for laboratory analysis for extractable petroleum hydrocarbons (EPH), volatile organic compounds (VOCs), volatile petroleum hydrocarbons (VPH), and MCP 14 metals. One soil sample from each boring at the depth that exhibited the highest field screening reading or field evidence of contamination was collected. If no field instrumentation readings were registered during drilling, the soil sample was collected from the vadose zone. The samples were preserved by ice, refrigeration and methanol, as appropriate, prior to laboratory analysis, and delivered to the laboratory accompanied by an appropriate chain of custody record.

#### 3.4 Groundwater Sampling

On June 5, 2019, CDW collected groundwater samples from three newly installed monitoring wells (GP1-3, GP1-5, and GP1-7) and one existing monitoring well (MW-2). All wells were allowed to equilibrate for at least one week prior to sampling. The wells were purged and sampled using disposable polyethylene bailers. At least three well volumes were purged from the well prior to collecting the samples. The groundwater collected was free of silt and was clear during the sampling event. The samples were submitted to CDW's subcontractor, Contest Laboratories, for analysis for EPH, VOCs, VPH, and MCP 14 Metals. The samples for metals analyses were filtered in the field



prior to preservation. In addition, groundwater from monitoring wells GP1-5 and GP1-7 were analyzed for herbicides, pesticides, and PCB's.

#### 3.5 Groundwater Gauging

On June 5, 2019, newly installed monitoring wells and existing monitoring wells were gauged for depth to groundwater and the presence of non-aqueous phase liquid (NAPL) using an oil/water interface probe. Measurements were made to the top of the PVC riser. No NAPL was observed in any on-site monitoring wells. Depth to groundwater ranged from 10.82 feet below the ground surface to 12.69 feet bgs. A groundwater elevation survey was performed. Groundwater appears to be potentially flowing in two directions at the site with a possible groundwater divide. Groundwater in the northern portion of 240 Beaver St appears to be flowing in a northeasterly direction toward a wetland area located in the southern portion of 225-227 Beaver Street. Groundwater in the southern portion of the site appears to be flowing in a southwesterly direction towards low wetland areas closest to Waverly Oaks Road.

Groundwater Flow direction was not calculated at 225-227 Beaver Street. No wells were installed due to possible bedrock refusal.

The depth to groundwater measurements are provided in Table 2.

#### 4.0 NATURE AND EXTENT OF CONTAMINATION

#### 4.1 Soil and Groundwater Classifications

The selection of a soil classification of RCS-1, as defined in the Massachusetts Contingency Plan (MCP), 310 CMR 40.0361(1)(a), for the comparison of Reportable Concentrations, is applicable to the Site because:

- The soil samples are located within 500 feet of a residential property.
- The property is zoned as a recreational area and is open to the public.

The selection of a groundwater classification of RCGW-2, as defined in the MCP, 310 CMR 40.0362, for the purpose of identifying Reportable Concentrations, was based upon the following criterion:

• RCGW-2 shall be applied to all groundwater that is not within a current or potential drinking water source area.



#### 4.2 Soil Sample Analysis Results

#### 240 Beaver Street

Laboratory analysis of soil samples did not reveal detectable concentrations of VPH compounds, VOC's, Herbicides, or PCB's.

Laboratory analysis of soil samples revealed detectable concentrations EPH compounds, total metals, and pesticides. EPH compounds detected in GP1-7 (10-12') and GP1-8 (10-12') are reported below MCP RCS-1 Reportable Concentrations. The presence of 4,4'-DDT was detected in GP1-7 (3-5') at a concentration of 12 milligrams per kilogram (mg/Kg, or parts per million, ppm) which is above the RCS-1 Standard of 6 mg/Kg. Several heavy metals were detected in GP1-7 (10-12') and GP1-8 (10-12'). Concentrations of Total Chromium (730 mg/kg) and Lead (220 mg/Kg) in GP1-7 (10-12') were detected above RCS-1 Reportable Concentrations of 100 mg/Kg and 200 mg/Kg, respectively. The results of all soil analyses are summarized in Table 1. A copy of the laboratory analytical report is included in Appendix B.

#### 225-227 Beaver Street

Laboratory analysis of soil samples did not reveal detectable concentrations of VPH compounds, VOC's, EPH compounds, Herbicides, or PCB's. Low levels of various heavy metals were detected in the three soil samples submitted for analysis. No concentrations were detected above MCP RCS-1 Reportable Concentrations.

#### 4.3 Groundwater Sample Analysis Results

#### 240 Beaver Street

Groundwater samples were analyzed for EPH, VPH, VOCs, PCB's, and MCP14 metals. No PCB's were detected in groundwater above laboratory detection limits.

No EPH and VPH concentrations were detected in newly installed monitoring wells GP1-3MW, GP1-5MW, and GP1-7MW. Low levels of C9 to C18 Aliphatics and Ethylbenzene were detected in a previously installed one-inch micro well in the vicinity of the former 7,500-gallon fuel oil UST's. No concentrations exceeded MCP RCGW-2 Standards.

Low levels of dissolved metals were detected in all four monitoring wells.

Low levels of pesticides were detected in monitoring well GP1-7MW located in the southern portion of the site. No concentrations exceeded MCP RCGW-2 Standards.



Low concentrations of VOC's were detected in monitoring wells GP1-7MW and MW-2. No concentrations exceeded MCP RCGW-2 Standards.

The results of groundwater analyses are included in Table 2. The laboratory analytical report is included in Appendix C.

#### 225-227 Beaver Street

No groundwater samples were collected from the site.

#### 5.0 SUMMARY

The Site study area for this Phase II Investigation consists of a portion of the property at 225-227 Beaver Street and 240 Beaver Street. This investigation focused on subsurface testing in areas of the property that are potential areas of environmental impact. Based upon the results of subsurface soil and groundwater testing and site observations, CDW is presenting a summary of the key observations.

On May 28 and 29, 2019, CDW advanced nine (9) soil borings (GP1-1 to GP1-9) at 240 Beaver St and GP2-1 to GP2-4 at 225 to 227 Beaver Street, respectively. A two-inch diameter monitoring well was installed to a depth of 20 feet in borings GP1-3MW, GP1-5MW, and GP1-7MW at 240 Beaver Street. No wells were installed at 225-227 Beaver Street due to possible bedrock refusal in all three borings and subsequent adjacent boring locations.

Soil samples were collected continuously from samples from each boring and field-screened with a PID for TOVs. One soil sample from each of nine (9) borings was selected and submitted for laboratory analysis for EPH, VPH, VOCs, PCB's, Herbicides, Pesticides, and MCP 14 Metals. Laboratory analysis of soil samples revealed detectable concentrations EPH compounds, total metals, and pesticides. EPH compounds detected in GP1-7 (10-12') and GP1-8 (10-12') are reported below MCP RCS-1 Reportable Concentrations. Low levels of 4-4' DDT were detected in GP1-7 (3-5') at a concentration of 12 mg/kg. Total Metals compounds were detected in GP1-7 (10-12') and GP1-8 (10-12'). Total chromium was detected at a concentration of 730 mg/kg, which is above the applicable RCS-1 threshold of 100 mg/kg. Lead was detected at a concentration of 220 mg/Kg which is above the applicable RCS-1 threshold of 200 mg/Kg.

On June 5, 2019, CDW collected groundwater samples from the newly installed monitoring wells (GP1-3MW, GP1-5MW, and GP1-7MW) and one existing monitoring well MW-2. Groundwater samples were analyzed for EPH, VPH, VOCs, PCB's, and MCP14 metals. Low levels of C9 to C18 Aliphatics and Ethylbenzene were detected in a previously installed one-inch micro well in the vicinity of the former 7,500-gallon fuel oil UST's. Low levels of dissolved metals were detected in all four monitoring wells.



Low levels of pesticides were detected in monitoring well GP1-7MW located in the southern portion of the site. No concentrations exceeded MCP RCGW-2 Standards. Low concentrations of VOC's were detected in monitoring wells GP1-7MW and MW-2. No concentrations exceeded MCP RCGW-2 concentrations.

#### 6.0 RECOMMENDATIONS

Based upon the Phase II Investigation, CDW has the following recommendations:

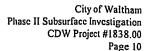
As stated above, several possible conditions exist that will require the current or potential future owner to report the release conditions to the MassDEP within 120-days of knowledge. It is possible that additional testing for the presence of Chromium (IV), coal, coal ash, and wood ash, and further inquiry about the historical use of pesticides will demonstrate that one or several of the reporting conditions are exempt as provided in the MCP.

Therefore, it is recommended that an additional soil sample be collected from adjacent to boring GP1-7 from the same depth and test for Hexavalent Chromium (Chromium VI), ORP, and pH and compare to existing RCS-1 standards. The testing would need to be completed within the 120-day period prior to notification. If the Chromium (VI) sample is lower than the applicable RCS-1 standard of 30 mg/kg, then notification to MassDEP for the presence of chromium will not be required.

In addition, the presence of lead at 220 mg/kg is reportable. The same soil sample should also be tested for the presence of coal, coal ash and wood ash. The presence of lead as a result of the coal, coal ash or wood ash would exempt the lead from the 120-day notification requirement as well. Lastly, the presence of 4-4' DDT may not be a reportable event if it can be demonstrated that it's presence is exclusively a function of its proper use in accordance with manufacturers labeling and specification.

If the presence of these contaminants persist, the MCP allows for situations where limited soil removal can be conducted (up to 20 cubic yards) as a "Limited Removal Action." If the work is completed and the soil is retested within 120-days and the results are less than the RCS-1 standard, then reporting will not be required.

Due to prior releases and uses of chemicals on-site, future soil excavation on-site should be conducted under a soil management plan. If soils will be exported, the quality of the exported Site soils must be acceptable to the destination site pursuant to MassDEP regulations and policies. At a minimum, the industry-wide practice of collecting one composite sample for every 500 cubic yards of soil to be disturbed should be tested for disposal or reuse analytical parameters. Additional sampling and testing may be required, based on the outcome of prior testing or other destination-specific requirements.





The sampling and analytical program was specific to one or more areas of the Site where testing was accessible, and potential contamination could have or has occurred. Historical research does not guarantee that all former Site use, storage and disposal practices have been properly recorded and/or are presently known. No opinion can be rendered on the presence or absence of contaminants in areas between the sampling locations identified herein. If during future site work or sampling, evidence of a release to soil and/or groundwater is encountered, measures must be conducted to properly manage those conditions.

#### 7.0 LIMITATIONS

This investigation was intended to provide a general assessment of current subsurface conditions and was limited in nature and scope. The findings are limited to the information available at the time of the investigation and the scope of services as defined. The results of the limited subsurface exploration performed on this Site provide the basis for the findings and are representative of conditions at the time of the investigation. No other conclusions, interpretations, or recommendations are contained or implied in this report other than those expressed. Also, CDW makes no warranty, expressed or implied, on the accuracy of the work and information completed by others and upon which CDW has relied to prepare this report. No other use of this report is warranted without the written consent of CDW Consultants, Inc.

# **FIGURES**

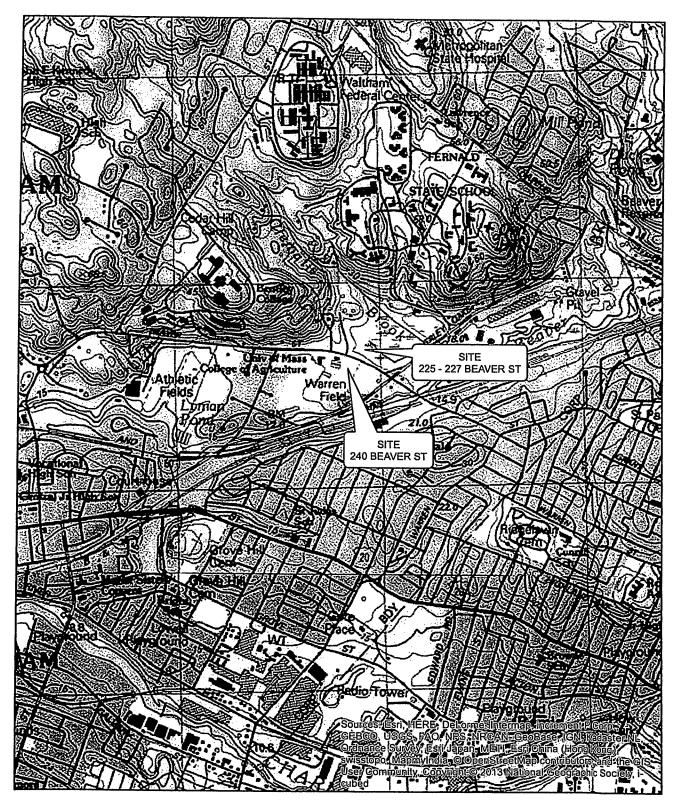


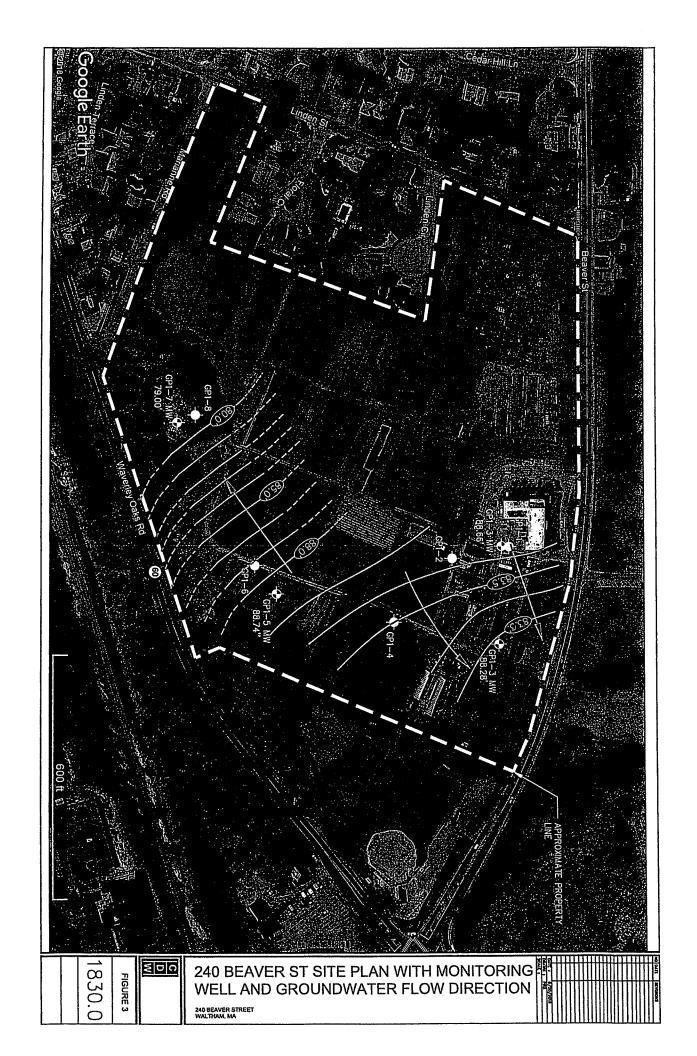




Figure 1 - Site Location Map







# **TABLES**

Table 1 Soil Anabhicol Results City of Waltham 225-227 240 Beaver Street, Waltham, MA

	Reportable Concentrations (RCs	entrations (RCs)							The second	100100100							
CLIENTID	RGS-1	FG5.2	GP1-1 (11-13) GP1-2 (0-2)	_	GP1-2 (11-13)	GP1-2 (11-13) GP1-3 (11-13)	1151.5116.105	166 - 64 - 437	SAMPLE CO.		-						
DATE SAMPLED			28-May-19	•	28-May-19	28.May-10	30 Mar. 10	30.5420.10	30 14-15 (3-2) UPZ-6 (31-13)		7	GP1-7 (10-12) GP1-8 (10-12)		GP1-9 (11-13) GP2-1 (6-8) GP2-2 (7-9) GP2-3 (7-9)	GP2-1 (6-8)	GP2-2 (7-9)	3P2-3 (7-9)
Sample Depth						CT. Asian Or	+-	GT-ABW-07	+	48-May-19	28-May-19	28-May-19	28-May-19	29-May-19	29-May-19	29-May-19	28-May-19
VOCs by GC/MS (mg/kg)										1							
Total VOCs		_					-										
Acetone	9	8	< 0.077	Ę	< 0.081	< 0.064	< 0.052	< 0.069	¥	< 0.078	¥	51.05	;	5000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	į	į
lert-Amyl Methyl Ether (TAME)		. }	< 0.00077	Ę	< 0.00081	< 0,00064	< 0.00062	< 0.00069	IN	< 0.00078	N	<0.0012	<0.0012	40.00079	<0.0005	200000	50.072
Denzene	7 :	8	< 0.0015	ŧ.	< 0.0016	< 0.0013	< 0.0012	< 0.0014	¥	< 0.0016	¥	<0.0024	<0.0023	<0.0016	< 0.0015	\$1000	40004
Bromochloromethane	P .	2000	40.0015	<b>z</b> !	<0.0016	< 0.0013	< 0.0012	< 0.0014	Ē	< 0.0016	¥	<0.0024	<0.0023	<0.0016	< 0.0015	< 0.0015	<0.0014
Bromodichloromethane	-		500015	Z \$	40,0016	<0.0013	< 0.0012	< 0.0014	Ż	<0.0016	ž	<0.0024	<0.0023	<0.0016	< 0.0015	< 0.0015	<0.0014
Bromoform	: 5	; -	21000	E 5	91000	500013	< 0.0012	< 0.0014	ž!	<0.0016	Ż	<0.0024	<0.0023	<0.0016	< 0.0015	< 0.0015	<0.0014
Bromomethane	5	50	× 0.0077	= <del> </del>	4 0.0018	40.0013	< 0.0012	< 0.0014 -0.0014	ž	<0.0016	¥ !	<0.0024	<0.0023	<0.0016	< 0.0015	< 0.0015	<0.0014
2-Butanone (MEK)	4	95	C0.031	: 5	2000	2000	20.002	40.00es	= !	40.0078	ŧ !	<0.012	<0.012	<0.0079	<0.0076	<0.0075	<0.0072
n-Butylbenzone	. ,		< 0.0015	 \	< 0.0016	60.02	50.025	970.02	Z 2	40.031	ž	60.049	<0.046	<0.032	<0.030	<0.030	<0.029
sec-Butylbenzene	ı	,	< 0.0015	Z	< 0.0016	<0.0013	<0.0012	40.00		9000	2 2	50.0024	500023	<0.0016	< 0.0015	< 0.0015	<0.0014
tert-Butylbenrene	100	1000	< 0.0015	Ę	< 0.0016	<0.0013	<0.0012	<0.0014	Z	<0.0016	ž	400024	50,002	40,0016	< 0.0015	< 0.0015	<0.0014
tert-Butyl Ethyl Ether (TBEE)	ı	,	< 0.00077	¥	< 0.00081	40.00054	<0.00062	<0.00069	ź	<0.00078	ž	<0.0012	<0.0012	40.000.02	2,000,00	20000	<0.0014
Carbon Disulfide	100	1000	< 0,0046	¥	< 0.0049	<0.0038	<0.0037	<0.0042	¥	<0.0047	Ę	<0.0073	<0.0070	<0.0048	CD 00.05	_	200007
Carbon Tetrachloride	'n	s	<0.0015	Z	< 0.0016	<0.0013	<0.0012	< 0.0014	Z	<0.0016	ķ	<0.0024	<0.0023	<0.0016	< 0.0015		2000
Chlorobenzene		m	< 0.0015	¥	< 0.0016	<0.0013	<0.0012	< 0.0014	¥	<0.0016	ž	<0.0024	<0.0023	<0.0016	< 0.0015		40.0014
Chlorodibromomethane	0.003	0.03	<0.00077	ž	<0.00081	<0.00064	<0.00062	<0.00069	¥	<0.00078	ž	<0.0012	<0.0012	<0,00079	<0.00076	<0.00075	200000
Chloraethane	8 1	1000	<0.0077	Z	<0.0081	<0.0064	<0.0062	<0.0069	ž	8700.0>	ž	<0.012	<0.012	<0.0079	<0.0076	<0.0075	<0.0072
Gleroform	7	0.5	<0.0031	<b>5</b> !	<0.0032	<0.0026	<0.0025	<0.0028	Ę	<0.0031	IN	<0.0049	<0.0046	<0.0032	<0.0030	<0.0030	<0.0029
Chloromethane	8 9	0001	<0.007	ž!	<0.0081	<0.0054	<0.0062	40,00g9	¥	<0.0078	¥	<0.012	<0.012	<0.0079	<0.0076	<0.0075	<0.0072
Z-Cultivitionene	3 5	9001	50.0015	ž !	< 0.0016	<0.0013	<0.0012	< 0.0014	ž	<0.0016	¥	<0.0024	<0.003	<0.0016	< 0.0015	< 0.0015	<0.0014
1 2. Dikromo. 3. chleromosan (DRCP)	§ £	100	20000	ž 5	40.0016	<0.0013	<0.0012	< 0.0014	<b>z</b> !	<0.0016	2	<0.0024	<0.0023	<0.0016	< 0.0015		<0.0014
1 2 Other southand (FOR)	3 2	1	72000	= =	970000	\$0.0013	50,0012 50,0012	\$100.00 S	z !	<0.0016	ž !	<0.0024	<0.0023	<0.0016	< 0.0015		<0.0014
Dihamomethan	1 5		20,000	ž	40.00081	40,00064	<0.00052	<0.00069	<b>z</b> !	<0.00078	<b>5</b> !	<0.0012	<0.0012	<0.00079	<0.00076	-	c0.00072
1.2-Dichlarobensene	6	100	c 0.0015	- <del>-</del>	60.0016	50.0013	200012	40.0014	ž ž	40,0016	ž	c0.0024	<0.0023	<0.0016	< 0.0015		<0.0014
1 3-Dichlorobearene		200	<0.0015	<b>.</b> 5	91000	5000	2000	70007	2 5	970000	= <u>+</u>	40.0024	<0.0023	<0.0016	< 0.0035	< 0.0015	<0.0014
1,4-Dichlorobenzene	0.7	-	< 0.0015	ž	< 0.0016	<0.0013	<0.0012	< 0.0014 < 0.0014	= 5	40.00	- <del>-</del>	C0.0024	40,0023	40,0016	< 0.0015	< 0.0015	<0.0014
Dichlorodifluoromethane (Freon 12)	1000	10000	<0.0077	¥	<0.0081	<0.0064	<0.0062	690000>	Z	\$0.0078	ż	2001	2000	9700.07	200013	50.0015	<0.0014
1,1-Dichloroethane	0,4	01	< 0.0015	¥	< 0.0016	<0.0013	<0.0012	< 0.0014	Ę	<0.0016	ž	<0.0024	<0.0023	40,0016	51000		20007
1,2-Dichloroethanc	0.1	0.1	< 0.0015	¥	< 0.0016	<0.0013	<0.0012	< 0.0014	ž	<0.0016	¥	<0.0024	<0.0023	<0.0016	< 0.0015	_	CO.0014
1,1-Dichlorocthylene	m	9	<0.0031	Ę	<0.0032	<0.0026	<0.0025	<0,0028	N	<0.0031	ž	<0.0049	<0.0046	<0.0032	<0.0030	_	<0.0029
cis-1,2-Dichloroethylene	:	2	< 0.0015	Ę	< 0.0016	<0.0013	<0.0012	< 0.0014	Ę	c0.0016	ž	<0.0024	<0.0023	<0.0016	< 0.0015	< 0.0015	<0.0014
trans-1,2-Dichloroethylene	;	;	< 0.0015	= :	< 0.0016	<0.0013	<0.0012	< 0.0014	ż!	<0.0016	Į,	<0.0024	<0.0023	<0.0016	< 0.0015		<0.0014
1 3-Dichlosopropae	: 5	1 005	50,000	= <del>-</del>	C 00081	50000	7100.02	40.0014 70.00060	 Z 5	<0.0016	Z :	40.0024	<0.0023	<0.0016	< 0.0015		<0.0014
2.2-Dichloropropane	0,1	0.2	< 0.0015	¥	< 0.0016	<0.0013	<0.0012	< 0.0014	- E	<0.0016	- <del>-</del>	<0.0024	<0.0073	50.000	40000 ×	2000/2	c0.00072
1,1-Dichloropropene	0.01	170	< 0.0015	M	< 0.0016	<0.0013	<0.0012	< 0.0014	¥	<0.0016	ż	<0.0024	<0.0023	<0.0016	< 0.0015		0.0014
cis-1,3-Dichloropropene	0.01	0.1	<0.00077	ž	<0.00081	<0.00064	<0.00062	<0.00069	ż	<0.00078	¥	<0.0012	<0.0012	<0.00079	<0.00076		<0.00072
trans-1,3-Dichloropropene	0.01	0.1	<0.00077	<b>z</b> !	<0.00081	<0.00064	<0.00062	69000'0>	Ż!	<0.00078	Z	<0.0012	<0.0012	6,000,0>	<0.00076	_	<0.00072
Diethy ether	3 5	8 9	40.007	ž	190000	40.0064	40.0062	40.0069	ž i	40.007B	Z !	<0.012	<0.012	40.0079	<0.0076		<0.0072
1 A Distance	3 2	ş .	7200	5 5	18000	2000	20.00	20,000	= 5	20.000	= 5	40.0014	20.001	6,000/9	40,00076	c0.00075   4	c0.00072
Fibulbeares	2	1000	< 0.0015	¥	< 0.0016	<0.0013	<0.0012	40.0014	- t	<0.0016	- E	<0.0024	c0003	91000	2000	5000	7000
Hexachlorobutadiene	30	100	< 0.0015	Ā	< 0.0016	<0.0013	<0.0012	<0.0014	¥	<0.0016	ž	<0.0024	<0.0023	<0.0016	< 0.0015		<0.0014
2-Hexanone (MBK)	50	1000	<0.015	¥	<0.016	<0.013	<0.012	<0.014	ž	<0.016	ž	<0.024	<0.023	<0.016	<0.015		<0.014
isopropylbenzene (Cumene)	1000	10000	< 0.0015	ž	< 0.0016	<0.0013	<0.0012	<0.0014	<u> </u>	<0.0016	ź	<0.0024	<0.0023	<0.0016	< 0.0015		<0.0014
p-isopropyltoluene (p-Cymene)	8 5	900	< 0.0015	<b>=</b> 5	< 0.0016	40.0013	<0.0012	40.0014	¥ 5	40.0016	¥ ¥	<0.0024	<0.0023	6.0016	< 0.0015	<0.0015	40.0014
Mathylene Chlaride	1	4	c0.0077	ź	<0.0081	₹0.0064	<0.0062	<0.0069	Ę	<0.0078	ž	<0.012	<0.012	<0.0079	<0.0076		<0.0072
4-Methyl-2-pentanone (MIBK)	0.4	S	<0.015	¥	<0.016	<0.013	<0.012	<0.014	¥	<0.016	¥	<0.024	<0.023	<0,016	<0.015		40.014
Naphthalene	4	2	<0.0031	ž	<0.0032	<0.0026	<0.0025	<0.0028	<u></u>	<0.0031	<u></u>	<0.0049	<0.0046	<0.0032	<0.0030	<0.0030	6200.0>

Table 1 Soil Analytical Results City of Woltham 225-227 240 Beaver Street, Waliham, MA

3   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,1   1,2,2,1   1,2,2,1   1,2,2,1   1,2,2,1   1,2,2,1   1,2,2,1   1,2,2,1   1,2,2,1   1,2,2,1   1,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2,2,2   1,2,2   1,2,2   1,2,2   1,2,2   1,2,2   1,2,2   1,2,2   1,2,2   1,		50005	N	< 0.0016	<0.0013	<0.0012	<0.0014	Z	1,000	ž	<0.0024	<0.0023	00000	cuonis	< 0.0015	40.00 100 100 100 100 100 100 100 100 100
0.00						-			CO.DOAD	:		2000				
0.000		< 0.0015	¥	40.0019	-0.0013	<0.0012	<0.0014	ž	40.00	- <u>-</u>	70000	50000	0.000	< 0.0015	C 1,0013	40.0014
500 500 300	0.02	<0.00077	Þ	<0.00081	<0.00064	<0.00062	40.00069	ž	<0.00078	ž	61000	C1000	070000	20000	50000	40.001
2 - 30		< 0.0015	Þ	< 0.0016	<0.0013	<0.0012	<0.0014	Z	<0.0016	5	20002	20000	510000	40.001	50000	<0.00072
30		<0.0077	Z	<0.0081	<0.005d	COUNCY	03000	5	01000	:		200.00	0100.0	cron v	< 0.0015	40.0014
2		< 0.0015	5	2100	6100		2000	: !	2000	Ξ !	7700	710.05	60000>	<0.0076	<0.0075	¢0.0072
2		21000	: 1	31000		7000	1000	= !	40,0016	Ž	<0.0024	<0.0023	<0.0016	<0.0015	<0.0015	<0.0014
7		1,000	: !	0,000	0.0013	7700.0	\$700°C	ž	40.001b	Ē	<0.0024	<0,0023	¢0.0016	< 0.0015	< 0.0015	<0.0014
		CTOO	ξ !	40.0016	<0.0013	<0.0012	<0.0014	<u> </u>	¢0,0016	¥	<0.0024	<0.0023	<0.0016	< 0.0015	< 0.0015	<0.0014
30		<0.0015	Ę	< 0.0016	<0.0013	<0.0012	40.0014	ž	<0.0016	¥	<0.0024	<0.0023	<0.0016	210002	25000	71000
0.1		< 0.0015	¥	< 0.0016	<0.0013	<0.0012	40 00 th	5	20000	¥	AC000 C	10000	2.00			
[		210007	5	20000			, ,	: !		: !		2000	20.00	<0.0015	< 0.0015	0.00
Ī			: !	ימימיות	6,0013	40.0012	CC:0014	Ξ.	40,0016	ž	<0.0024	<0.0023	40.0016	< 0.0015	< 0.0015	<b>c</b> 0.0014
renioratius ometane (Freen 11)		/00.00	ž	<0.0081	<0.0064	<b>CO005</b>	<b>40.0069</b>	ž	<0.0078	E	<0.012	<0.012	<0.0079	<0.0076	<0.0075	CC0003
190		<0.0015	z	< 0.0016	<0.0013	<0.0012	<0.0014	Z	<0.0016	¥	<0.000	50003	2000	1000	1000	
1000		<0.0015	¥	< 0.0016	CD 0013	21000	2000	17	2000	1	1000					7000
ç		21000		2000				: !	0,0010	= !	*70000	6700.00	CO.UNIE	< 0.0015	< 0.0015	<b>c0.0014</b>
1		CTON'O	Ē	aronn	50,0013	40.0012	40.0014	ž	40,0016	ž	<0.0024	<0.0023	<b>40.0016</b>	< 0.0015	< 0.0015	<b>\$0.00</b>
3		40,0077	¥	<0.0081	<0.0054	<0.0062	<0.0069	Ę	*0.007B	N	<0.012	<0.012	620000	<0.0076	50000	,00073
- 19		<0.0031	ž	<0.0032	<0.0026	<0.0025	<0.0028	ž	<0.0031	Į,	690000	20000	20000	00000	0.00	
190		< 0.0015	Ż	< 0.0016	<0.0013	21000	40.00	5	200015	. <u>\$</u>	9000	2000	70000	00000	0.0030	0000
	1						1		9700'0		*0.00£4	\$200,00	co.co.ib	< 0.0015	< 0.0015	<0.0014
															-	
1000	3000	< 10	Þ	=	5	5	=	5		1		,	;	•		:
		1	: !	;	;	;	;	<b>E</b>	3	Ξ	70	7.	=	2	2	₽
		92	Ę	ij	91,0	2	=======================================	ž	01,0	¥	250	870	<b>*11</b>	5.5	5	;
Unadjusted C11-C22 Aromatics		< 10	ž	- 11	615	- 12		ż	,	5	5	250			;	
			: !	; ;		3 :	;	Ē	3	=	2	7	=	2	9	1
1000		27	ž	=	9	2.0	₽	Ż	410	Ę	130	750	411	010	v 10	=
_		< 0.10	Z	< 0.11	< 0.10	< 0.10	< 0.11	Z	< 0.10	ż	200		:: <	9,0,0		
•		40.0						: !		: !	9	1,5	1	07.00	25.20	<b>4</b> 0.11
		0.10	 Z	CU.13	<b>0</b> .10	×0.10	<b>4</b> 0.11	- E	<b>60.10</b>	ž	v 0.23	< 0.71	< 0.11	< 0.10	< 0.10	< 0.11
1000		< 0.10	z	<0.11	<0.10	< 0.10	< 0.11	ž	× 0.10	IN	C023	1202		01.07	0,0,	
-			ŧ				1 :	: !		: !	}	7	1177	7.5	20.20	V 0.11
`		c0.10	Z	40.11	¢0.10	<b>0.10</b>	¢0.11	 \	40.10	Z	< 0.23	¢0.71	< 0.11	< 0.10	< 0.10	0.29
		< 0.10	ž	< 0.11	<0.10	010	1107	5	0,00	5						1
T			: !						2	= !	9	7	77.0	0.30	0.20	0.63
,		<b>40.10</b>	Ż	<0.11	< 0.10	<b>40.10</b>	¢0.11	z	c 0.10	z	<0.23	<0.71	40.11	< 0.10	< 0.10	990
0001	_	00.00	Ż	1100	40.0	50,		17	910	5		16.07				
T			: !	! ;				: !	2 1	: !	7		170,	07:0	or.o.	5
1000	_	- C.10	ž	<b>4</b> 0.11	<0.10	v 0.10	40.11	Z	< 0.10	Z	< 0.23	< 0.71	<0.11	< 0.10	< 0.10	0.23
2		< 0.10	z	< 0.11	< 0.10	< 0.10	< 0.11	¥	< 0.10	L Z	< 0.23	100				
		5,	5			9,0			0,0,						2	ì
75		7	Ē	1100	7	170	77.0	<u> </u>	OT.O.	Ē	£7.0.5	T/70>	V0.11	<0.10	×0.10	< 0.11
1000		¢0.10	z	< 0.11	¢0.10	¢0.10	< 0.11	ž	< 0.10	¥	579	< 0.71	<0.11	< 0.10	< 0.10	27.0
2		01.0>	Þ	£0.11	01.02	01.00		5	250	5	6007	.00	10,			;
T			: !					: !	2	: !	1	1	1	2	07.70	1170
		0.10	ž	C0.31	<b>40.10</b>	v 0.10	<b>4</b> 0.11	Z	<b>4</b> 0.30	-	< 0.23	< 0.71	<0.11	× 0.10	< 0.10	93
0.7		< 0.10	Þ	<0.11	c0.10	< 0.10	< 0.11	Z	< 0.30	Z	< 0.23	< 0.71	<0.11	<0.00	01.03	4015
Ī			ţ					ţ	5,0	:						
1		7	= !	1	2	3	1		9	=	9	7	17.0.	77.0 ×	or To	¢0.11
10		< 0.10	ž	C0.11	¢0.10	¢0.10	<0.11	¥	¢ 0.10	<u>-</u>	< 0.23	< 0.71	< 0.11	< 0.10	¢ 0.10	0.26
1000	3000	< 0.10	Z	< 0.11	< 0.10	< 0.10	<0.11	¥	<b>60,10</b>	IN.	< 0.23	< 0.71	< 0.11	< 0.10	< 0.10	0.56
					1	l				l	l					
		i	ļ		1	1			-		-	-				
		?	Z	č	?	7.7	V 8.0		9./2	=	<b>432</b>	< 16	67.9	× 8.6	_	×8.6
200	200	¢ 7.8	z	7. 8	<7.5	7.7	¢80	z	47.6	Z	<b>-</b> 35	<b>~</b> 16	¢7.9	× 8.6		< 8.6
		0,7	1	é	,	,	60,	5	367	12	,,,	31,	.,	9		
,	1	; ;	: !	; ;	1	;		. !	; ;	: !	; ;	; ;	3	000		0.0
CONT	DONE	9//	Ē	7.0	?	;	0.85	Ξ	9	Ξ	75.5	97		9.9		9.6
901	200	<7.8	Z	<b>3</b> 5	¢7.5	¢7:7	~ 8.0 *	<u>_</u>	<7.6	z	<b>3</b> 3	, 16 16	¢7,9	× 8.6		× 8.6
	200	0200	12	2000	8200	8000	0000	12	4 0 0 3 B	5	40.0	9200	0000	6900	-	5000
			•	,,,,	0000							0.00	0000			
	POOT -	40.037	2	97.7	\$0.U30	CU.U30	20.0	 E	9000		97.7	000	20.03	50.043	-	< 0.045
Methyl text-Butyl Ether (MTBE) 0.1	100	<0.039	z	<0.046	<0.038	<0.038	× 0.040	Z	< 0.038	Z	< 0.16	< 0.079	< 0.039	60063		< 0.043
0001	10000	<0.20	Ę	<0.23	-0.19	60.19	< 0.20	M	< 0.19	ž	< 0.80	< 0.40	<0.20	<0.21	< 0.23	<0.21
-		0000	ţ	2000	0000	0100	0700		0500	-	,	0000	01001	,,,,,,		
~	201	6000	=	2000	0,000	0000	5	Ξ !	2000	E !	2,0	6,000	6000	5	_	2
201	901	<0.07B	Ż	<0.092	<0.075	<0.07	< 0.080	- E	< 0.076		< 0.32	< 0.16	< 0.079	<b>40.086</b>	_	< 0.086
- 25	100	C0.039	Z	<0.046	<0.038	<0.038	× 0.040	Ż	<0.038	ž	< 0.16	< 0.079	< 0.039	<0.043	_	< 0.043
															ł	
			!					!								,
20	30	<1.7	ž	41.8	<1.7	<1.7	<1.7	¥	¢1.7	ž	V	< 2.3	<b>41.7</b>	¢1.7	<1.7	۰1.8
20	20	<1.7	ž	4,2	<1.7	<1.7	<1.7	Þ	<1.7	ž	6.9	13	<1.7	¢1.5		77
1000	565	43	5	=	9	2	9		70	1-2	46.	8	,			; ;
-	3	,		2	`	3	: ;	: !	<b>S</b> ;	- ·	2	2	3	3	2	ş
2	200	0.26	- V	0.19	0.18	0.24	0.19	Ę	0.2	N.	6.0	0.38	0.19	0.29	0.19	0.31

Toble 1 Soil Anabylcal Results City of Waltham 225-227 240 Beaver Street, Waltham, MA

Cadmium	5	001	603	5					!	;	•		_			•	
Chromium	91	200	6	Ę	9.9	5.2	22	2.3		(L.1)	z ż	2 5	6,0	<0.17	¢0.17	<0.17	0.38
lead	200	009	v	Ę	9.2	2	. 88	9.6	ž	i ki	: 2	220	ā ē	2 2	86 7	•	= :
Mercury	2	8	< 0.026	¥	< 0.026	< 0.025	< 0.024	< 0.026	Ę	< 0.025	ž	0.6		5000	2007		2 2
Nickel	99	1000	89	Ę	5.6	4.5	8.5	9'9	ĸ	. 6.7	ž	9	32	5.5	12 4	20.02	9 5
Selenium	6	8	3.5	Į.	3.6	< 3,4	<3.5	< 3.4	¥	< 3.4	ž	<7.5	< 4.6	<3.4	43.4	9.5	3 5
Silver	901	802	<0.35	¥	<0.36	< 0.34	< 0.35	< 0.34	¥	< 0.34	Ņ	6.0	< 0.46	< 0.34	< 0,34	40.34	960>
Thailium	∞ ;	8	<1.7	Į,	<1.8	<1.7	<1.7	<1.7	¥	<1.7	ž	< 3.8	<2.3	¢1.7	41.7	41.7	41.8
Vanadium	900	300	<b>#</b> 5	\$ 5	ጃ ና	<b>3</b>	<b>22</b> 2	ខ្ល	5 5	ដ ន	Ę.	25 55	89	<b>8</b>	4	13	33
Pesticides (ma/ko)						1		1	ž	•	Ē	S40	390	25	SE	×	2
Aldrin	80'0	0.5	ž	< 0.031	¥	¥	5	¥	< 0.0059	ž	020000	5	ş	Į,	ţ	1	!
alpha-BHC	8	200	Ż	< 0.031	¥	Ę	Ę	Ę	< 0.0059	ž	< 0.0070	Ż	Ż	ž	ž	ž 5	ž
beta-8HC	22	100	ž	< 0.031	ż	¥	Ę	ż	< 0.0059	Z	< 0.0070	ž	Ż	5	= 5	- E	2 5
delta-BMC	2	901	ž	< 0.031	¥	¥	ž	ž	< 0.0059	ž	< 0.0070	Z	Þ	ž	<u> </u>	- E	= 5
gamma-BHC (Undane)	0.003	50	ž	< 0.012	¥	¥	¥	Į,	< 0.0023	Ę	< 0.0028	Ę	Z	Ż	. <u>.</u>	ż	2
Chlordane	s	30	Ę	< 0.12	Ę	Ę	Ę	Ę	< 0.023	Ę	0.11	ž	¥	Ę	Ż	ż	- <u>-</u>
4,4*-000	80	\$	Ę	< 0.025	Ę	¥	Ä	K	< 0.0047	Z	0.44	¥	ž	ž	ż	ž	5
4,4-DDE	9	30	¥	0.57	Ę	Ę	¥	Z	0.027	IN	27	¥	Z	ž	Z	Z	<u> </u>
4,4'-DDT	۵	8	ž	0.48	ž	¥	Ę	Z	0.02	ž	Ħ	Ĭ	ĸ	¥	Z	Ž	Ż
Dieldrin	0.08	0.5	Ę	< 0.025	¥	¥	Þ	Į.	< 0.0047	¥	0.092	K	¥	Z	Z	ž	- <del>-</del>
Endosulfan i	0.5	-	¥	< 0.031	¥	ž	¥	۲	< 0.0059	ž	< 0.0070	ĸ	¥	Ż	ž	Ę	ž
Endosulfan II	5.0		ž	< 0.050	ž	ž	۶	¥	< 0.0094	ž	< 0.011	¥	ž	Ę	ž	ž	, <u>†</u>
Endosulfan Sulfate		,	Ā	< 0.050	ž	Z	¥	'n	< 0.0094	Ę	< 0.011	ž	Z	¥	Ż	Z	: 5
Endrin	2	20	ĸ	< 0.050	ž	¥	Ę	ž	< 0.0094	ž	0.035	N.	Ā	Þ	×	Ż	ż
Endrin Ketone	,	,	ž	< 0.050	ħ	¥	Þ	¥	< 0.0094	ž	0.013	ž	۲	¥	Į,	ž	ž
Heptachlor	63	7	Ä	< 0.031	¥	ž	Z	ž	< 0.0059	¥	< 0.0070	¥	ž	ž	ź	Ę	Z
Heptachlor Epoxide	0,1	6,0	¥	< 0.031	Ę	ž	¥	¥	< 0.0059	Z	0.0083	Ā	Ę	Ň	¥	ž	ž
Hexachlorobenzene	6.0	0.8	Ę	< 0.037	¥	¥	¥	ž	< 0.0070	ž	< 0.0083	¥	N T	¥	×	Z	ż
Methoxychlar	200	400	ħ	< 0.31	Į,	I	M	MT	< 0.059	M	< 0.070	M	M	¥	¥	Ę	ž
Herbicides (mg/kg)																	Ī
2,4-D	50	1000	¥	< 0.160	ž	Ę	Ę	Ē	< 0.029	Ę	< 0.170	Ę	ź	ž	ž	ž	ž
2,4-08	90	1000	¥	< 0.160	Ę	¥	¥	¥	< 0.029	Ę	< 0.170	¥	Ę	Ę	ž	Ę	ž
2,4,5-TP (Silvex)	8	1000	Ż:	< 0.016	¥	Z	ž	Z	< 0.0029	ž	< 0.017	Ę	¥	¥	¥.	¥	¥
2,4,5-1	8	1000	ž !	40.016	ž :	z :	<b>z</b> !	ž!	< 0.0029	ž	< 0.017	ż:	ŧ!	<b>z</b> !	ž	Ę	ž
Dalapon	Ę	8	ž į	0.350	ž į	z ţ	z !	ž į	c0.073	Z !	0.430	ž	ž !	ž!	ž!	<b>5</b> !	¥ !
Dicklesson	3	200	į	0150	= 5	- 5	- E	5 5	6000	= =	0230	2 5	z \$	2 2	ž	2 5	ž
description of the second	200	2000	ž	< 0.078	Z	ž	- <del>-</del>	Z	< 0.015	ž	× 0.086	ž	Ż	. k		- E	= E
MCPA	100	1000	¥	< 16	Ę	¥	¥	Ę	< 2.900	ž	¢17	¥	¥	IN	Ę	¥	Ę
MCPP			¥	< 16	TN.	٤	Ę	¥	< 2.900	ž	<17	¥	Ν	Ĭ	ž	¥	Ā
PCB Soxhlet (mg/kg)	,		;			-	!	-!	-			:	!	!			
Arocior-1016	٠,		ž !	40,037	Ξ !	Ξ!	<del>-</del>	= !	760'0	ž!	1 :	Ξ :	ž!	ž!	ž!	Z :	ž
Arocior-1221	-		ž!	<0.097	ž!	<del>z</del> !	z!	ž	260.05	ž!	100	ž !	Z !	ž!	ž!	ż!	Z
Aroclar-1232	-	₹	Ž	×0.037	ž	ž	Ž	ž	760'02	Ž.	CO.11	Z :	Ē!	ž !	Ž	ž	ž
Araclor-1242	-	4	<b>2</b>	< 0.097	Z	2	<b>5</b> !	ž!	260'0>	ŧ!	<0.11	z !	ž!	ž!	Ż	<u> </u>	Ż
Aroclor-1248	-	4	Z	< 0.097	ž!	Z :	ž !	ž!	< 0.092	ž !	40.11	ž!	ξ!	ž!	ž !	ž !	Ż
Aroclor-1254	-	4	z!	<0.097	ž!	ž!	Į.	<b>=</b> !	< 0.092	<b>Z</b> :	11.00	= :	Ξ :	¥ !	ž :	= !	<u> </u>
Aroclor-1260	- ·	•	ž i	×0.09/	ž	Z I	ž	Z 5	7,000	ž	40.11	Z 5	2 2	2 2	ž \$	z	z i
Aroclor-1262		. 4	z z	< 0.097	E	2 2	= =	- <b>-</b>	< 0.092	Ę	3 3	ž	<u> </u>	ž	ΞŻ	= \f	= <del>=</del>
Comment Chemistry & Mr.																-	Ī
& Solids			96.4	7.67	92.2	95.4	97.1	94.8	85.4	98	677	43	70.3	56	96.3	96	91.8

Table 2

City of Waltham
Groundwater Sample Results
225-227 240 Beaver Street, Waltham, MA

Parameter RC Sampling Date Sample Depth MADEP.EPH.04.11 [µg/l.] C9-C18 ALIPHATICS C19-C36 ALIPHATICS C19-C36 ALIPHATICS C11-C22 AROMATICS ACEMAPHTHENE ACEMAPHTHENE	CGW-1	RCGW-1 RCGW-2 GW-1		GW-2	GW-3	מנו	GP-3 MW	GP-5 MW	GP-7 MW 6/5/2019 12:05:00 PM	MW-2 6/5/2019 1:30:00 PM
ug/L)							CICIONIO 0.15.00 AM	C/C/7019 10-30-00 AM	6/5/2019 12:05:00 PM	6/5/2019 1:30:00 PM
Hg/L)		_					ואוש חחוכדות הזחד/כ/ם	מוש אמימבימד בדמד/כ/ם		
1971) 2 AROMATICS	T	1	1	1		1				
2 AROMATICS			-							
2 AROMATICS	8	2000	8	9	2000	100000	ND (100)	ND (100)	(56) QN	150
2 AROMATICS	600	2000	14000	?	2000	100000	ND (100)	ND (100)	(S6) QN	(66) QN
	:	·		ł	,		ND (100)	ND (100)	(S6) QN	(66) QN
ш	 202	2000	8	20000	2000	100000	(DOI) GN	(001) GN	(S6) QN	(66) QN
	2	0009	2	,	10000	100000	ND (2.0)	ND (2.0)	(1.9) ND	ND (2.0)
	9	9	8	10000	9	100001	ND (2.0)	ND (2.0)	ND (1.9)	ND (2.0)
ANTHRACENE	30	30	9	ł	R	909	ND (2.0)	ND (2.0)	ND (1.9)	ND (2.0)
BENZO(G,H,I)PERYLENE	2	22	8	,	2	200	ND (2.0)	ND (2.0)	ND (1.9)	ND (2.0)
FLUORANTHENE	8	200	8	,	200	2000	ND (2.0)	ND (2.0)	(6.1.9)	ND (2 0)
	200	9	90	1	6	400	ND (2.0)	ND (2.0)	(6 L) CN	(0.2) CN
APHTHAIENE	. 2	2000	9	2000	20000	100000	NO (2 G)	(0 C) CN	(5.7) ON	(0.5) CN
	. 5	Ę	: 5	1	8	00000	10 17 011	10 (5.0)	(cr) ou	10 (5.0)
	? ;	3 5	3 4	₹ ≀	2000	200001	ND (2.0)	(0.2) UN	(5.1.9)	(0.2) ON
	? ?	3 6	2	,	2		10 C C C	(0.0)	(6.1.0)	ND (2.0)
1	†	1	1	1	1	1	NO (2.0)	(C.2) CN	(CT) (NO	ND (2.0)
(7/6)										
8 AUPHAINS							(100) ND (100)	(100) ND (100)	(1001) (1001)	(DDL) GN
	 8	900	 8	9	00005	10000	ND (100)	(00I) QN	ND (100)	ND (100)
2 ALIPHATICS	į	ı	,	2	,	į	ND (100)	ND (100)	ND (100)	(100) ON
C9-C12 ALIPHATICS 7	8	200	욷	2000	2000	100000	ND (100)	ND (100)	ND (100)	ND (100)
C9-C10 AROMATICS 2	200	4000	200	4000	20000	100000	(100) QN	ND (100)	ND (100)	(100) QN
BENZENE	2	1000	r.	1000	10000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
ETHYLBENZENE 7	8	2000	8	20000	2000	100000	ND (1.0)	ND (1.0)	ND (1.0)	2.2
METHYL TERT-BUTYL ETHER (MTBE)	2	2000	2	20000	20000	100001	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
NAPHTHALENE	140	200	140	28	20000	100000	ND (5.0)	ND (5.0)	ND (5.0)	(0.2) QN
	000	40000	1000	20000	40000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
32 2	3000	3000	10000	3000	2000	100000	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)
	900	3000	10000	3000	2000	100001	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
208 (µg/l) Metals Digestion	T	l								
	9	8000	9	1	8000	80000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
	- 21	006	9	,	900	0006	ND (0.80)	ND (0.80)	12	ND (0.80)
	000	20000	2000	,	20000	100000	92	42	70	æ
Σ	4	200	4	·	202	2000	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
	4	4	'n	,	4	8	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	99	30	8	,	300	3000	, ,	4	4.7	11
	9	2	21	,	2	150	E	6,1	3.2	ND (0.50)
	100	200	8	,	200	2000	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Σ	20	100	S	ı	100	1000	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
		7	8	2	7	1000	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	2	3000	7	ŧ	3000	30000	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	20	4000	æ	;	4000	40000	5.7	ND (5.0)	ND (5.0)	ND (5.0)
	8	98	2000	,	900	20000	15	ND (10)	12	ND (10)
470A (mg/L) Metals Digestion				Ī	- 8	;	(1 to 000 to 1 to 1	101000 01 011	torono es els	101000007
MERCURY	7000	0,02	0.002	†	707	3	ND (0.00010)	(0.00010)	וסגממטיטן מא	מסימים! מע

Table 2 City of Waltham Groundwater Somple Results 225-227 240 Beaver Street, Waltham, MA

ALDRIN	0.5	2	0.5	7	93	300	Z	1 ND /0 0533	10000	!	
ALPHA-BHC	200	2000	,	,	. 1		5	(CC) (A) (A)	(/com) on	ž !	
вета-вис	8	1000	,	1	,	,	: 1	(50.0) 014	7. (	<b>z</b> !	
DELTA-BHC	8	1000	,	,	ŧ	,	: 2	100,000	7	L !	
GAMMA-BHC (LINDANE)	2		5	Ş		,	: 1	10 (0.033)	41	Ē	
CHORDANE	,		ļ ,	}	г •	,	<b>:</b> !	ND (0.032)	0.36	M	
4,000	, ;	٠.	٠ ;		7 5	₹ ;	K !	ND (0.21)	3.2	¥	
4. DDG	3 6	2 5	7 6		2 5	3 5	ž :	ND (0.042)	ND (0.046)	M	
100.77	6 6	ş .	9 (		5	9000	¥.	ND (0.042)	ND (0,046)	¥	
100-4%		7 ;	6.0		- ·	<b>a</b>	IN	ND (0.042)	0.057	IN	
DIELDRIN	7	5.0		∞	0.5	8	I	ND (0.0021)	0,19	K	
ENDOSULFANI	7	2	ន	,	7	100	M	ND (0.053)	ND (0.057)	Z	
ENDOSULFAN II	7	2	2	ł	7	8	Ĭ	ND (0.084)	(260.0) QN	5	
ENDOSULFAN SULFATE	,	ì	1	ı	ı	,	LN.	ND (0.084)	1260.0) GN	: 5	
ENDRIN	7	'n	7	ı	5	8	ž	ND (0.084)	(COO O) CN	: 5	
ENDRIN KETONE	,	,	ı	,	1	ı	IN	ND (D DR4)	ND (0.092)	= 5	
HEPTACHLOR	0.4	-	0.4	^	-	5	: <b>5</b>	(COC) ON	(250.0) ON	Ξ !	
HEPTACHLOR EPOXIDE	0	,	2	. ^	,	1 8	: 2	(0.053)	(veneral)	ž !	
UEXALUI DODOCUTENE	-				, 8	2 8	: :	(600.0) (1)	cr'n	ž	
METUONOLIOP	4 5	٠ ;	٠	1 1	3 5	800	ž !	(0.053)	ND (0.057)	Ż :	
ואפושטעוכשו	1		7	T	1	3	Z	ND (0.53)	ND (0.57)	N	
(1/5H) WZ80R 987-MS	,	_		1							
PCB 1016	0.5	'n	S	'n	2	텵	N.	ND (0.21)	ND (0.23)	N	
PCB 1221	0.5	'n	50	Ŋ	2	8	TN	ND (0.21)	ND (0.23)	¥	
PCB 1232	0.5	s,	0.5	v	2	5	Ħ	ND (0.21)	ND (0,23)	M	
PCB 1242	0.5	5	0.5	'n	2	8	Z	ND (0.21)	ND (0.23)	¥	
PCB 1248	0.5	s	0.5	v	8	100	M	ND (0,21)	ND (0.23)	¥	
PCB 1254	0,5	'n	0.5	s	8	91	TN	ND (0.21)	ND (0.23)	¥	
PCB 1260	0.5	Ŋ	0.5	2	2	100	IN	ND (0.21)	ND (0.23)	¥	
PCB 1262	0.5	ın	0.5	'n	2	100	IN	ND (0.21)	ND (0,23)	IN	
PCB 1268	0.5	5	0.5	2	92	100	NT	ND (0.21)	ND (0.23)	¥	
SW-846 8151A (µg/l.)											
2,4-D	1000	10000	,	ı	ı	ı	N.	ND (0.51)	ND (0.50)	IN	
2,4-DB	1000	10000	,	ł	,	,	M	ND (0.51)	ND (0.50)	¥	
2,4,5-TP (SILVEX)	1000	10000	ı	ı	,	,	IN	ND (0.051)	ND (0.050)	Į,	
2,4,5-T	1000	10000	ı	,	,	,	F	ND (0.10)	(0.10) ON	Ĭ	
DALAPON		,	ł	ı	:	ŧ	ž	ND (1.3)	ND (1.2)	Ę	
DICAMBA	2000	20000	,	ì	ı	ı	M	ND (0.051)	ND (0.050)	¥	
DICHLOROPROP	ł	ı	ı	t	t	,	NT	ND (0.51)	ND (0.50)	Ę	
DINOSEB	2000	20000	,	1	,	,	IN	ND (0.26)	ND (0.25)	¥	
MCPA	1000	10000	ì	,	ı		Ā	ND (51)	(0S) QN	F	
MCPP	*	ł	,	,	,	2	NT	ND (51)	(SO) ON	NT	
SW-846 8260C (µg/L)											
ACETONE	6300	20000	6300	20000	20000	100000	(DE) QN	(DT) GN	ND (10)	(D) QN	
TERT-AMYL METHYL ETHER	ł	;	,	,		,	ND (0.50)	(0:50) QN	ND (0.50)	ND (0.50)	
BENZENE	s	1000	ıs	1000	10000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
BROMOBENZENE	1000	10000	,	;	_	,	ND (1.0)	ND (1.0)	ND (1,0)	ND (1.0)	
BROMOCHLOROMETHANE	ı	ı	ı	ı		,	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
BROMODICHLOROMETHANE	m	•	m	9		100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
вкомогоям	4	20	4	200	20000	100000	(0.1) QN	ND (1.0)	ND (1.0)	ND (1.0)	
BROMOMETHANE	_	7	8	~		8000	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	
	•	•						•		•	

Table 2

City of Waltham

Groundwater Somple Results
225-227 240 Beaver Street, Waltham, MA

2-BUTANONE (MEK)	4000	20000	4000	20000	20000	100000	ND (10)	(01) QN	(01) QN	ND (10)	
N-BUTYLBENZENE	,	,	ŧ	į	ł		ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
SEC-BUTYLBENZENE	ł	ı	ı	,	,	,	ND (1.0)	ND (1.0)	ND (1.0)	(O L) QN	
TERT-BUTYLBENZENE	1000	10000	1	ı	ı	,	ND (1.0)	ND (3.0)	ND (1.0)	(OT) CN	
FRT-BUTYLETHYL ETHER		,	ł		,	,	(05 O) QN	ייייייייייייייייייייייייייייייייייייייי	אסיטיטא	1010101	
CARBON DISULFIDE	1000	10000	ł	ì	ı	ì	ND (5.0)	(0.5) CM	(DE) CN	(OC'O) CN	
CARBON TETRACHLORIDE	7	2	'n	7	2000	20000	ND (1 0)	( ) (N	(5.5) ON	(0.5) CM	
CHLOROBENZENE	8	200	100	200	1000	10000	ND (1.0)	ND (3.0)	11 11	ND (3.0)	
CHLORODIBROMOMETHANE	7	2	2	2	20000	,	ND (0.50)	(05.0) ON	(D) (O)	ND (0 50)	
CHLOROETHANE	1000	10000	ı	1		,	ND (2.0)	ND (2,0)	ND (2.0)	ND (2.0)	
CHLOROFORM	S	8	2	S	20000	100000	ND (2.0)	ND (2.0)	( C) (N	() () (N	
CHLOROMETHANE	1000	10000	;	ł	,		ND (2.0)	ND (2.0)	ND (2.0)	(0.5) CN	
2-CHLOROTOLUENE	1000	10000	ı	,	ł	,	ND (1.0)	IO CI ON	NO CE	2 5	
4-CHLOROTOLUENE	1000	10000	,	,	ı	,	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
1,2-DIBROMO-3-CHLOROPROPANE	100	1000	,	ı	,	,	ND (2,0)	ND (2.0)	ND (2.0)	ND (2.0)	
1,2-DIBROMOETHANE (EDB)	0.02	7	0.02	~	20000	100000	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	
DIBROMOMETHANE	2000	20000	ł	,	,	,	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
,2-DICHLOROBENZENE	909	2000	8	8000	2000	80000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
,3-DICHLOROBENZENE	92	9009	91	9009	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
1,4-DICHLOROBENZENE	'n	8	s	9	8000	80000	ND (1.0)	ND (1.0)	5,4	ND (1.0)	
DICHLORODIFLUOROMETHANE	10000	100000	,	,	,	•	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	
1,1-DICHLOROETHANE	2	2000	2	2000	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
.2-DICHLOROETHANE	s	s	'n	s	20000	100000	ND (1.0)	ND (1.0)	1.7	ND (1.0)	
1.1-DICHLOROETHYLENE	7	8	^	8	30000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
CIS-1,2-DICHLOROETHYLENE	20	20	2	2	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
MANS-1,2-DICHLOROETHYLENE	88	8	100	8	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
,2-DICHLOROPROPANE	ю	m	'n	m	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
,3-DICHLOROPROPANE	2000	20000	ì	,	,	,	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	
,2-DICHLOROPROPANE	2	øn.	,	,	,	,	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
1,1-DICHLOROPROPENE	0.5	5	ì	,	ı	,	ND (0.50)	(0:50) QN	ND (0.50)	ND (0.50)	
IIS-1,3-DICHLOROPROPENE	0.5	S	0,4	유	200	2000	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	
TRANS-1,3-DICHLOROPROPENE	0.5	S	0.4	2	200	2000	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	
DIETHYL ETHER	1000	10000	,	,	,	,	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	
DIISOPROPYL ETHER	1000	10000	ŧ	,	,	3	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	
1,4-DIOXANE	0.3	0009	0.3	9009	20000	100000	ND (50)	(05) GN	(05) QN	ND (50)	
ETHYLBENZENE	28	2000	8	20000	2000	100000	ND (1.0)	ND (1.0)	ND (1.0)	2.4	
HEXACHLOROBUTADIENE	9.0	8	9,0	8	3000	30000	ND (0.60)	(0.60) ND (0.60)	ND (0.60)	ND (0.60)	
2-HEXANONE	1000	10000	,	,	,	;	ND (10)	ND (10)	ND (10)	ND (10)	
SOPROPYLBENZENE	10000	100000	,	,	,	1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
P-ISOPROPYLTOLUENE	1000	10000	,	,	,	:	ND (1.0)	(0.1) dN	ND (1.0)	ND (1.0)	
METHYL TERT-BUTYL ETHER (MTBE)	2	2000	20	20000	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
METHYLENE CHLORIDE	s	2000	Ŋ	2000	20000	100000	ND (5.0)	(0.5) dN	ND (5.0)	ND (5.0)	
1-METHYL-2-PENTANONE (MIBK)	350	20000	320	20000	20000	100000	ND (10)	ND (10)	ND (10)	ND (10)	
VAPHTHALENE	140	902	140	8	20000	100000	ND (2.0)	ND (2:0)	ND (2.0)	ND (2:0)	
4-PROPYLBENZENE	1000	10000	,	1	ì	,	ND (1.0)	ND (1.0)	(D.1.0)	ND (1.0)	
STYRENE	100	10	38	ă	000	00009	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
1.1.1.2-TETRACHLOROETHANE	s	9	s	q	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
1,1,2,2-TETRACHLOROETHANE	~	6	~	6	20000	100000	ND (0.50)	(0:50) QN	(0.50) dN	ND (0.50)	
ETRACHLOROETHYLENE	25	8	'n	20	30000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
			-	-	-	-				-	_

City of Waltham Groundwater Sample Results 225-227 240 Beaver Street, Waltham, MA Table 2

			•	-	•	•	•				
TETRAHYDROFURAN	2000	20000	,	ì	ŧ	ı	ND (2.0)	ND (2:0)	ND (2.0)	ND (2.0)	
TOLUENE	1000	40000	1000	20000	40000	100000	ND (1,0)	ND (1.0)	ND (1.0)	(0.1) QN	
1,2,3-TRICHLOROBENZENE	1	,	,	,	ı	,	ND (2.0)	ND (2.0)	ND (2.0)	(0.2) GN	
1,2,4-TRICHLOROBENZENE	92	200	20	200	2000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
1,1,1-TRICHLOROETHANE	208	4000	200	4000	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
1,1,2-TRICHLOROETHANE	S	900	'n	8	20000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
TRICHLOROETHYLENE	٠,	5	w	s	2000	20000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
TRICHLOROFLUOROMETHANE	10000	100000	,	,	,	,	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	
1,2,3-TRICHLOROPROPANE	1000	10000	į	,	,	,	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	
1,2,4-TRIMETHYLBENZENE	10000	100000	ı	ı	,	'	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
1,3,5-TRIMETHYLBENZENE	8	1000	ı	,	,	,	ND (1.0)	. ND (1.0)	ND (1.0)	ND (1.0)	
VINYL CHLORIDE	~	~	7	~	20000	100000	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	
M/P-XYLENE	3000	3000	10000	3000	2000	100000	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	
O-XYLENE	3000	3000	10000	3000	2000	100000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	
SW-846 8270D (µg/L)											
BENZO(A)ANTHRACENE	-	1000	н	1	1000	10000	ND (1.0)	ND (1.0)	ND (0.95)	(0'0) QN	
BENZO(A)PYRENE	0.2	200	0.2	,	200	2000	ND (0.20)	ND (0.20)	ND (0.19)	ND (0.20)	
BENZO(B)FLUORANTHENE		400	н	,	400	4000	ND (1.0)	ND (1.0)	ND (0.95)	(66'0) QN	
BENZO(K)FLUORANTHENE	-	100		,	100	1000	ND (1.0)	ND (1.0)	(56'0) GN	(66'0) QN	
CHRYSENE	7	2	7	,	2	8	ND (2.0)	ND (2.0)	ND (1.9)	ND (2:0)	
DIBENZ(A,H)ANTHRACENE	0.5	8	9.5	,	8	400	ND (0.50)	ND (0:50)	ND (0.48)	ND (0.49)	
INDENO(1,2,3-CD)PYRENE	0.5	100	0.5	ĭ	8	1000	ND (0.50)	ND (0.50)	ND (0.48)	ND (0.49)	
NOTES:							:				

1. An asterisk (\*) following a detection limit indicates that the minimum laboratory reporting limit exceeds one or more of the regulatory criteria.

2. ND = Not detected above the lab reporting limits shown in parenthesis.

3. NT = Not tested.

4. = No Mentod 1. Standard or UCL available

5. Shaded values exceed the MCP Reportable Concentrations (RCs).

6. Bolded values exceed the Method 1 Cleanup Standards.

7. Bold Red values exceed the TCLP limits.

# APPENDIX A

### CDW Consultants, Inc.

Project No.: Total Depth:

1830 9 ft Date Started: 5/28/2019 Client: Location:

City of Waltham 225-227 Beaver St Completed: 5/28/2019

BORING ID: GP2-3 Logged By: AMS Contractor:

Crawford

Casing ID: Remarks:

6610 DT Geoprobe

Sheet #: Ground El.

<del>()</del>		Samp	le				. E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0.0	brown loamy soil	
-1					1	tan to brown fine SAND, trace coarse sand with gravel; dry	
-2					0.0	Tace coalse sain, with glaver, dry	
-3					3		
-4			5'		0.0	brown fine SAND, 8" coarse sand layer, gray gravel with silt lenses; dry	
-5	S2		5'	36"	5		
-6					0.0	brown fine SAND, trace medium sand with gravel and silt lenses; dry	
-7					7		
-8					0.0		
-9						End of Boring at 8 feet; Refusal at 9 ft	
-10			10'			·	
-11							
-12					1		
-13							
-14					<b> </b>		
-15					-		l
-16					<b> </b>		
-17							
-18					1		
-19							
-20							
		Ground	water M	936!!"	ement	Note: 3 additional attempts did not drill past 9 feet  Summary	<u> </u>
[	Date	Time	Depth to				
-						Rock: NA	
				<u></u>		Well Depth: NA	
<u> </u>		<u></u>	1			Boring: 9 ft	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830 9 ft

Client: Location:

City of Waltham 225-227 Beaver St

BORING ID: GP2-2 Logged By:

**AMS** 

Casing ID:

Date Started: 5/28/2019

Completed: 5/28/2019 Ground El.

Contractor: Sheet #:

Crawford

Remarks: 6610 DT Geoprobe Depth (Feet) Sample Well Diagran PID Hdspace (ppmv) Type & Num. Depth Range Recovery Blows per 6 inches **Sample Description** brown loamy soil 0.0 tan to brown fine SAND, trace coarse sand with gravel; dry 0.0 -2 -3 3 See Above 0.0 -4 S2 -5 36" brown fine SAND, trace medium sand 0.0 -6 with gravel and silt lenses; dry 0.0 -8 -9 End of Boring at 8 feet; Refusal at 9 ft 10' -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 Note: 3 additional attempts did not drill past 9 feet

	Ground	iwater weasurements	5	Summary	
Date	Time	Depth to Groundwater	Measuring Point	Overburden:	Fill; Sand
				Rock:	NA
				Well Depth:	NA
				Boring:	9 ft

### CDW Consultants, Inc.

Project No.: Total Depth:		Client: Location:	City of Waltham 225-227 Beaver St	BORING ID: Logged By:	GP2-1 AMS
Date Started:	<u>5/28/2019</u>	Completed:	5/28/2019	Contractor:	Crawford
Casing ID:		Ground El.		Sheet #:	1
Remarks:	6610 DT Geoprobe				

S1	£		Samp	le		T		Ē
O	Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagra
1	0	S1			40"	1	brown loamy soil	
-2	-1					1		
3	-2						uace coise sailt with graver, thy	
4	-3					3		
S   S   S   S   S   S   S   S   S   S	-4			E'			See Adove	
6	-5	S2			36"			.
-8	-6					0.0		
-8	-7					7		
-9	-8					•	End of Boring at 8 feet; Refusal at 8 ft	
-10	-9			10'		9		
-12	-10			10				
-13	-11							
-14	-12							
-15	-13		-					
-16	-14					-		
-17	-15							
-18	-16							
-19	-17							
-20   Note: 3 additional attempts did not get past 9 feet	-18							
Note: 3 additional attempts did not get past 9 feet	-19							
Date   Time   Depth to Groundwater   Measuring Point   Overburden:   Fill; Sand   Rock:   NA   Well Depth:   NA	-20						Natural Cardallianna de Marcada III de la compansión de l	
Date Time Depth to Groundwater Measuring Point Overburden: Fill; Sand Rock: NA Well Depth: NA	┢═┵		Groundy	vater Me	asure			
Rock: NA Well Depth: NA	D	ate					Measuring Point Overburden: Fill; Sand	
							Rock: NA	
Boring: 8 ft								]
							Boring: 8 π	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830 20 ft Date Started: 5/28/2019

Client: Location:

Ground El.

City of Waltham 240 Beaver St Completed: 5/28/2019

BORING ID: GP1-6 Logged By:

AMS Crawford

Casing ID: Remarks:

6610 DT Geoprobe

Contractor: Sheet #:

et)		Sam	ole		J		ΙĒ
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0	black asphalt and graded base	
-1					0.0	CAN CAN CAN CAN CAN CAN CAN CAN CAN CAN	
F	<del>                                     </del>		1		2	tan to gray fine SAND, trace gravel with broken concrete pieces; dry	
-2					2	(FILL)	
-3	<del> </del>	<u> </u>	<del>                                     </del>		0.8	ton to grow fine to silk, fine CANID	
		<u> </u>	1		4	tan to gray fine to silty fine SAND, little medium sand; dry	
-4					4	,	ļ
-5	S2		5' 5'	48"	1.1		
					6		
-6					6	11.16.18.20.20.20.20.20.20.20.20.20.20.20.20.20.	
-7			-		0.9	black fine to silty fine SAND, trace medium sand, with wood and glass; dry	
					8	wat wood and glass, dry	
-8	<u> </u>		<u> </u>		8		
-9					1.6		
			10'		10		
-10	S3	<u> </u>	10'	60"	10		
-11					2.1		
-12	<u> </u>				12	, ,	
-12					12	trace coarse sand with gravel pieces; moist to wet	ļ
-13					1.3		
-14					14		
-14		·····	15'				
-15	S4		15'		0.7		
-16				-	16 16		
					0.1		
-17					[	gray fine to silty fine SAND, trace medium sand,	
-18				·	18 18	trace coarse sand with silt lenses; wet	ŀ
					0.0		l I
-19			201				
-20			20'		20	End of Boring at 20 feet; No Refusal	
	ate	Ground Time	water Me		***		
		111116	Debitt 10	Ground	uwater	Measuring Point Overburden: Fill; Sand Rock: NA	
						Well Depth: NA	
						Boring: 20'	

#### CDW Consultants, Inc.

Project No.: Total Depth: City of Waltham BORING ID: GP1-7MW 1830 Client: 20 ft Location: 240 Beaver St Logged By: AMS Date Started: 5/28/2019 Completed: 5/28/2019 Contractor: Crawford Casing ID: Ground El. Sheet #:

Remarks: 6610 DT Geoprobe

et)	Sample				J	The second secon	Well Diagram		
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description			
0	S1		0'	40"	0		TTI		
					0.1	tan to brown fine SAND, little coarse sand			
-1						trace medium sand with wood and gravel; dry			
-2					2	(FILL)			
					0.0	reflects featured at USA language and Adultum residency and residency and advantage and residency of the process of the community of the commu			
-3					0.0	tan to gray fine to silty fine SAND,			
-4					4	little medium sand with wood and glass; dry	111		
-4	]		5'						
-5	S2		5'	48"	0.1				
					6				
-6					6	his in the site of the Control of the control of th			
-7					0.1	black fine to silty fine SAND, trace medium sand, with broken glass, asphalt pieces, concrete pebbles; dry			
- <b>-</b>	<del>                                     </del>				8	With District glass, aspiral pieces, solitore possies, ary			
-8					8				
			<u> </u>		0.3				
-9	<b></b>		10'		10				
-10	S3		10'	60"	10				
					0.9				
-11					ļ	See Above			
-12	<u> </u>		ļ		12 12				
-12					1	Approximate Water Table gray fine to silty fine SAND, trace medium sand,			
-13					0.6	trace coarse sand with gravel pieces; moist to wet			
					14				
-14			15'		14				
-15	S4		15' 15'		0.1				
					16				
-16					16				
					0.0	area fine to silty fine CANID trace medium cond			
-17					18	gray fine to silty fine SAND, trace medium sand, trace coarse sand with silt lenses; wet			
-18				<b> </b>	18	addo codido dana with one johood, wat			
					0.0				
-19					1				
-20			20'		20	End of Boring at 20 feet; No Refusal			
-20	<b></b>		<del> </del>	<del> </del>	+	Life of borning at 20 feet, 140 feetaal			
	L	Ground	water Mo	easur	ement	s Summary			
С	Date	Time	Depth to	Grour	ndwater	Measuring Point Overburden: Fill; Sand			
						Rock: NA			
			<del>                                     </del>			Well Depth: NA Boring: 20'			
		L	l		······································	I pointy. 20			

### CDW Consultants, Inc.

Project No.: Total Depth:

1830 20 ft Date Started: 5/28/2019 Client: Location: City of Waltham 240 Beaver St

BORING ID: GP1-6 Logged By: Contractor:

AMS Crawford

Casing ID: Remarks:

6610 DT Geoprobe

Completed: 5/28/2019 Ground El. Sheet #:

et)		Samp	le				Ë	
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)		Sample Description	Well Diagram
0	S1		0'	40"	0.0	- bla	ck asphalt and graded base	
-1					1	tan to q	ray fine SAND, trace gravel with	
					0.0		oken concrete pieces; dry	
-2					3		(FIEL)	l
-3					3	tan to	tan to gray fine to silty fine SAND,	
-4					0.0		little medium sand; dry	
			5'		5			
-5	S2		5'	48"	5			l
-6					0.0			
					7	gray fine to	silty fine SAND, trace medium sand,	1
-7	ļ				7	with pebbles; dry		
-8					0.0		ĺ	
					9			
-9			10'		9		İ	
-10	S3		10'	60"	0.1			
-11					11 11			
					0.1	gray fine to	silty fine SAND, trace medium sand,	
-12							sand with gravel pieces; moist to wet	
-13					13 13			
					0.0			
-14			15'		15			
-15	S4		15'		15			
16					0.1			
-16					17			
-17					17		silty fine SAND, trace medium sand,	
-18						trace o	oarse sand with silt lenses; wet	
					0.0			
-19			001		0.0			
-20			20'		20	End of	Boring at 20 feet; No Refusal	
Groundwater Measurements Summary								
D	ate	Time	Depth to	Groun	dwater	Measuring Point	Overburden: Fill; Sand Rock: NA	
							Well Depth: NA	
							Boring: 20'	

## CDW Consultants, Inc.

Project No.:	1830	Client:	City of Waltham	BORING ID:	GP1-5MW
Total Depth:	_20 ft	Location:	240 Beaver St	Logged By:	AMS
Date Started:	5/28/2019	Completed:	5/28/2019	Contractor:	Crawford
Casing ID:		Ground El.		Sheet #:	1
Remarks:	6610 DT Geoprobe				

et)	Sample			Ë			
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0.0	black asphalt and graded base	TT
-1					1	tan to gray fine SAND, trace gravel with	
					0.0	broken concrete pieces; dry	
-2					4	(FILE)	
-3				-	3	tan to gray fine to silty fine SAND,	
					0.0	little medium sand; dry	
-4				5'	5		
-5	S2		5'	48"	5		
-6					0.0		
			<u> </u>	-	7	gray fine to silty fine SAND, trace medium sand,	
-7					7	with pebbles; dry	
-8				-	0.0		
					9		
-9			10	<u> </u>	9		
-10	S3		10'	60"	0.1		
						Approximate Water Table	
-11				-	11		
-12					0.1		
-13				_	13 13	gray fine to silty fine SAND, trace medium sand,	
-13					1	trace coarse sand with gravel pieces; moist to wet	
-14					0.0		
-15	S4		1! 15'	5'	15 15		
			10		0.1		
-16							
-17					17 17	gray fine to silty fine SAND, trace medium sand,	
					1	trace coarse sand with silt lenses; wet	
-18				-	0.0		
-19				<b>-</b>	1		
00			20	י'כ	20		
-20				-		End of Boring at 20 feet; No Refusal	
		Ground					L
D	ate	Time	Depth	o Groun	dwater	Measuring Point Overburden: Fill; Sand	
			<u> </u>			Rock: NA Well Depth: NA	
				·····		Boring: 20'	

#### CDW Consultants, Inc.

Project No.: Total Depth: 1830 20 ft

Client:

City of Waltham

BORING ID: GP1-4

Date Started: 5/28/2019 Casing ID:

Location: 240 Beaver St Completed: 5/28/2019 Ground El.

Logged By: Contractor:

Sheet #:

AMS Crawford

Remarks:

6610 DT Geoprobe

e e	Sample				Ē					
Depth (Feet)	Туре & Num.	Blows per 6 Inches		Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram		
0	S1		0,		40"	0.0	black asphalt and graded base			
-1	<del></del>	1	-			1	FOR CANDA			
			†			1	tan to gray fine SAND, trace gravel with broken concrete pieces; dry			
-2						0.0	(FILL)			
-3	-				<u> </u>	3	- <del>1</del>			
			1			1	tan to gray fine to silty fine SAND, little medium sand; dry			
-4						0.0				
-5	S2		5'	5'	48"	5				
-	<u> </u>		13		40	1				
-6						0.0				
-7	-		_			7	gray me to only mic of many made intodiant daria,	•		
	<del>                                     </del>		╁			1	with pebbles; dry			
-8						0.0				
-9		<u> </u>	↓			9				
-9	<del> </del>		╁	10'		9				
-10	S3		10'		60"	0.1		l		
44	ļ		<u> </u>			11				
-11	<del> </del>		├			11	gray fine to silty fine SAND, trace medium sand,			
-12						0.1	trace coarse sand with gravel pieces; moist to wet			
46						13	, , , , , , , , , , , , , , , , , , , ,			
-13	<del> </del>	<u> </u>	-			13				
-14						0.0				
				15'		15				
-15	S4		15'			15				
-16			<del>                                     </del>			0.1				
4 ==						17				
-17						17	gray fine to silty fine SAND, trace medium sand,			
-18			<del>                                     </del>			_	trace coarse sand with silt lenses; wet			
						0.0				
-19										
-20			ļ	20'		20	End of Boring at 20 feet; No Refusal			
			$\vdash$	-			Lind of boiling at 20 leet; NO Refusal	ŀ		
	Groundwater Measurements Summary									
	Date	Time	Dep	oth to	Ground	dwater				
							Rock: NA Well Depth: NA	—		
			├				11100 = 0pun 1111	- 1		

Boring:

20'

## CDW Consultants, Inc.

Project No.:	1830	Client:	City of Waltham	BORING ID:	GP1-3MW
Total Depth:	20 ft	Location:	240 Beaver St	Logged By:	AMS
Date Started:	5/28/2019	Completed:	5/28/2019	Contractor:	Crawford
Casing ID:		Ground El.		Sheet #:	1
Remarks:	6610 DT Geoprobe				

<del>\$</del>		Samp	le	***			Ē
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0.0	black asphalt and graded base	TT
-1						CONTRACTOR CONTRACTOR	
					1	tan to gray fine SAND; trace gravel with broken concrete pieces; dry	
-2					0.0	(FILL)	
-3					3		
-5	<b></b>				1	tan to gray fine to silty fine SAND. little medium sand; dry	
-4					0.0	. ,	
-5	S2		5' 5'	48"	5		
				70			
-6					0.0		
-7					7	gray fine to silty fine SAND, trace medium sand, with pebbles; dry	
•					0.0	With possios, dry	
-8					]		
-9					9		
			10'		0.1		
-10	S3		10'	60"	<u> </u>		
-11					11 11		
					0.1	Approximale Water Table	
-12					1	and the territory CAND types medium and	
-13					13 13	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet	
					0.0	<b>3</b>	
-14			15'		15		
-15	S4		15'		15		
					0.1		
-16					17		
-17			<del>                                     </del>		17	gray fine to silty fine SAND, trace medium sand,	
					]	trace coarse sand with silt lenses; wet	
-18					0.0		
-19				<b></b> -	1		
			20'		20		
-20			<del> </del>		<u> </u>	End of Boring at 20 feet; No Refusal	
	L	Ground	water Mo	easure	ement	s Summary	
E	ate	Time				Measuring Point Overburden: Fill; Sand	
						Rock: NA Well Depth: NA	
			<b></b>		·	Boring: 20'	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830 20 ft Date Started: 5/28/2019 Client: Location:

Ground El.

City of Waltham BORING ID: GP1-2 240 Beaver St Completed: 5/28/2019

Logged By: Contractor:

Sheet #:

AMS Crawford

Casing ID: Remarks:

6610 DT Geoprobe

					F 1		Well Diagram
Depth (Feet)	Type & Num.	Blows per 6 Inches	Oepth Range	Recovery	PID Hdspace (ppmv)	Sample Description	
0	S1		0'	40"	0.0	black asphalt and graded base	
							l
-1					1	tan to gray fine SAND, trace gravel with	
-2					0.0	broken concrete pieces; dry (FILU)	
					3	ADMINISTRAÇÃO DE COMPANIO DE COMPA	1
-3					3	tan to gray fine to silty fine SAND,	l
<u> </u>					0.0	little medium sand; dry	
-4			5'		5		
-5	S2		5'	48"	5		
					0.0		l
-6					4 _1		
					7	gray fine to silty fine SAND, trace medium sand, with pebbles; dry	ĺ
-7	<del> </del>			<u> </u>	1 1	with peobles, dry	
-8					0.0		
					9		1
-9			401	<u> </u>	9		
-10	S3		10' 10'	60"	0.1		
-10	33		10	00	11		
-11					11		
					0.1	gray fine to silty fine SAND, trace medium sand,	
-12	<u> </u>	ļ			.]	trace coarse sand with gravel pieces; moist to wet	
-13	<u> </u>				13 13		
10	<del> </del>				1		
-14					0.0		
ļ		<u> </u>	15'		15		
-15	<u>S4</u>		15'		15		
-16	<u> </u>			<del> </del>	0.1		
··					17		
-17					17	gray fine to silty fine SAND, trace medium sand,	
			<b> </b>	ļ	4	trace coarse sand with silt lenses; wet	
-18			<b></b>	ļ	0.0		
-19	<del> </del>		<del>                                     </del>	<del>                                     </del>	1		
<u></u>			20'		20		
-20						End of Boring at 20 feet; No Refusal	
ļ		<u> </u>			<u></u>	Summary	<u> </u>
-	Date	Ground Time	water Me Depth to				
<del></del>	Jaie	THE	Debiii (C	Giodi	idvatel	Rock: NA	
						Well Depth: NA	
						Boring: 20'	

### CDW Consultants, Inc.

Project No.: Total Depth:

1830 20 ft

Client: Location:

City of Waltham 240 Beaver St

BORING ID: GP1-1 Logged By:

AMS

Date Started: 5/28/2019 Casing ID: Remarks:

6610 DT Geoprobe

Completed: 5/28/2019 Ground El.

Contractor: Crawford Sheet #:

et)	Sample						100000000000000000000000000000000000000	E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)		Sample Description	Well Diagram
0	S1		0,	40"	0.0	bla	ck asphalt and graded base	r e
-1				<b> </b>	1	tan to gray/fine SAND, trace gravel with		
					0.0	b	broken concrete pieces, dry	
-2					ļ		(FILL)	
-3					3	tan t	o gray fine to silty fine SAND,	
					0.0		little medium sand; dry	
-4			5'		5			
-5	S2		5'	48"	5			
-6					0.0			
-0					7	grav fine to	silty fine SAND, trace medium sand,	
-7					7	g,	with pebbles; dry	
-8					0.0			
Ľ					9			
9			4.01		9			
-10	S3		10' 10'	60"	0.1			
					11			
-11					11		allia Cara CAND III III II	
-12					0.1		silty fine SAND, trace medium sand, sand with gravel pieces; moist to wet	
					13		The state of proceed, motor to the	
-13					13			
-14					0.0			
45	- 54		15'		15			
-15	S4		15'		15			
-16					0.1			
47					17		W 5 04ND 1	
-17					17		silty fine SAND, trace medium sand, coarse sand with silt lenses; wet	
-18					0.0		said adia mili dir lollood, wor	
-19					0.0			
-13			20'		20			
-20						End of	Boring at 20 feet; No Refusal	1
		Ground	vator 84-	201172	mont	· · · · · · · · · · · · · · · · · · ·	Cummons	1
D	Date Time Depth to Groundwater				Measuring Point	Summary Overburden: Fill; Sand		
			- 1- 11 12				Rock: NA	
							Well Depth: NA	
							Boring: 20'	

# APPENDIX B



June 10, 2019

Marian Rambelle CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

Project Location: Beaver St., Waltham, MA

Client Job Number: Project Number: [none]

Laboratory Work Order Number: 19E1819

Michelle Koch

Enclosed are results of analyses for samples received by the laboratory on May 31, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Koch Project Manager

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CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 ATTN: Marian Rambelle

REPORT DATE: 6/10/2019

PURCHASE ORDER NUMBER:

PROJECT NUMBER:

[none]

#### **ANALYTICAL SUMMARY**

WORK ORDER NUMBER:

19E1819

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Beaver St., Waltham, MA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
GP1-1 (11-13)	19E1819-01	Soil		MADEP-EPH-04-	1.1
				MADEP-VPH-Fe	b
				2018 Rev 2.1	
				SM 2540G SW-846 6010D	
				SW-846 7471B	
			·	SW-846 8260C	•
GP1-2 (11-13)	19E1819-02	Soil		MADEP-EPH-04-	-1.1
511 = (11 15)	.,2101, 02			MADEP-VPH-Fe	
				2018 Rev 2.1	•
				SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8260C	
GP1-3 (11-13)	19E1819-03	Soil		MADEP-EPH-04	-1.1
				MADEP-VPH-Fc	b
				2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
CD1 4 (11 12)	1071010.04			SW-846 8260C	
GP1-4 (11-13)	19E1819-04	Soil		MADEP-EPH-04	
				MADEP-VPH-Fe 2018 Rev 2.1	:0
				SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8260C	
GP1-5 (11-13)	19E1819-05	Soil		MADEP-EPH-04	-1.1
				MADEP-VPH-Fo	eb
				2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8260C	
GP1-6 (11-13)	19E1819-06	Soil		MADEP-EPH-04	
				MADEP-VPH-F	eb
				2018 Rev 2.1 SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8260C	
				3 W-840 820UC	



CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 ATTN: Marian Rambelle

PURCHASE ORDER NUMBER:

REPORT DATE: 6/10/2019

PROJECT NUMBER:

[none]

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER:

19E1819

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Beaver St., Waltham, MA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
GP1-7 (10-12)	19E1819-07	Soil		MADEP-EPH-04- MADEP-VPH-Fe 2018 Rev 2.1 SM 2540G	
				SW-846 6010D SW-846 7471B	
			•	SW-846 8260C	•
GP1-8 (10-12)	19E1819-08	Soil		MADEP-EPH-04	-1.1
				MADEP-VPH-Fo 2018 Rev 2.1 SM 2540G	b
<i>)</i> .				SW-846 6010D	
				SW-846 7471B	
				SW-846 8260C	
GP1-9 (11-13)	19E1819-09	Soil		MADEP-EPH-04	-1.1
				MADEP-VPH-Fo 2018 Rev 2.1 SM 2540G	b
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8260C	
GP2-1 (6-8)	19E1819-10	Soil		MADEP-EPH-04	-i.1
				MADEP-VPH-Fo 2018 Rev 2.1	
				SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8260C	
GP2-2 (7-9)	19E1819-11	Soil		MADEP-EPH-04	I-1.1
				MADEP-VPH-F 2018 Rev 2.1 SM 2540G	eb
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8260C	
GP2-3 (7-9)	19E1819-12	Soil		MADEP-EPH-0	4-1.1
				MADEP-VPH-F 2018 Rev 2.1	eb
)				SM 2540G	
				SW-846 6010D	
				SW-846 7471B	



CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 ATTN: Marian Rambelle

.

PURCHASE ORDER NUMBER:

[none]

REPORT DATE: 6/10/2019

PROJECT NUMBER:

ANALYTICAL SUMMARY

WORK ORDER NUMBER:

19E1819

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Beaver St., Waltham, MA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
GP1-2 (0-2)	19E1819-13	Soil		SM 2540G	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8151A	
GP1-6 (3-5)	19E1819-14	Soil		SM 2540G	
				SW-846 8081B	•
				SW-846 8082A	
				SW-846 8151A	
GP1-7 (3-5)	19E1819-15	Soil		SM 2540G	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8151A	



#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 8151 samples were derivatized on 06/06/19.

For method 8151 sample analysis bracketed by LCS to monitor esterification. All recoveries in the bracketing LCS met method criteria.



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 MADEP-EPH-04-1.1

Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria. Analyte & Samples(s) Qualified:

B232351-BSD1, B232351-MS1

RL-08

Elevated reporting limit due to sample matrix interference. MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:

2-Methylnaphthalene

19E1819-08[GP1-8 (10-12)]

Acenaphthene

19E1819-08[GP1-8 (10-12)]

Acenaphthylene

19E1819-08[GP1-8 (10-12)]

Anthracene

19E1819-08[GP1-8 (10-12)]

Benzo(a)anthracene

19E1819-08[GP1-8 (10-12)]

Benzo(a)pyrene

19E1819-08[GP1-8 (10-12)]

Benzo(b)fluoranthene

19E1819-08[GP1-8 (10-12)]

Benzo(g,b,i)perylene

19E1819-08[GP1-8 (10-12)]

ızo(k)fluoranthene

.уЕ1819-08[GP1-8 (10-12)]

C9-C18 Aliphatics

19E1819-08[GP1-8 (10-12)]

Chrysene

19E1819-08[GP1-8 (10-12)]

Dibenz(a,h)anthracene

19E1819-08[GP1-8 (10-12)]

Fluoranthene

19E1819-08[GP1-8 (10-12)]

19E1819-08[GP1-8 (10-12)]

Indeno(1,2,3-cd)pyrene

19E1819-08[GPI-8 (10-12)]

Naphthalene

19E1819-08[GP1-8 (10-12)]

Phenanthrene

19E1819-08[GP1-8 (10-12)]

Pyrene

19E1819-08[GP1-8 (10-12)]

MADEP-VPH-Feb 2018 Rev 2.1

#### Qualifications:

0-01

Soil/methanol ratio does not meet method specifications. Excess amount of soil. Sample was completely covered with methanol, but with less than the method-specified amount. Analyte & Samples(s) Qualified:

9E1819-01[GP1-1 (11-13)], 19E1819-02[GP1-2 (11-13)], 19E1819-03[GP1-3 (11-13)], 19E1819-04[GP1-4 (11-13)], 19E1819-05[GP1-5 (11-13)], 19E1819-06[GP1-6 -13)], 19E1819-09[GP1-9 (11-13)], 19E1819-10[GP2-1 (6-8)], 19E1819-12[GP2-3 (7-9)]

SW-846 6010D

Qualifications:



VIS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

19E1819-02[GP1-2 (11-13)], B232592-MS1

Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting

limit (RL). Analyte & Samples(s) Qualified:

Arsenic

19E1819-02[GP1-2 (11-13)], B232592-DUP1

Cadmium

19E1819-02[GP1-2 (11-13)], B232592-DUP1

SW-846 8081B

Qualifications:

DL-03

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

19E1819-13[GP1-2 (0-2)]

P-02

Sample RPD between primary and confirmatory analysis exceeded 40%. Per EPA method 8000, the lower value was reported due to obvious chromatographic interference on the column with the higher result. Analyte & Samples(s) Qualified:

Fudrin Ketone

1819-15[GP1-7 (3-5)]

\*\*eptachlor Epoxide [2C]

19E1819-15[GP1-7 (3-5)]

SW-846 8082A

Qualifications:

O-32

A dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

19E1819-13[GP1-2 (0-2)], 19E1819-14[GP1-6 (3-5)], 19E1819-15[GP1-7 (3-5)]

SW-846 8151A

Qualifications:



DL-03

Elevated reporting limit due to matrix interference.

#### Analyte & Samples(s) Qualified:

19E1819-15[GP1-7 (3-5)]

2,4,5-T

19E1819-13[GP1-2 (0-2)]

2,4,5-T [2C]

19E1819-13[GP1-2 (0-2)]

2,4,5-TP (Silvex)

19E1819-13[GP1-2 (0-2)]

2,4,5-TP (Silvex) [2C]

19E1819-13[GP1-2 (0-2)]

2,4-D

19E1819-13[GP1-2 (0-2)]

2,4-D [2C]

19E1819-13[GP1-2 (0-2)]

2,4-DB

19E1819-13[GP1-2 (0-2)]

2,4-DB [2C]

19E1819-13[GP1-2 (0-2)]

2,4-Dichlorophenylacetic acid

19E1819-13[GP1-2 (0-2)]

2,4-Dichlorophenylacetic acid [2C]

19E1819-13[GP1-2 (0-2)]

Dalapon

19E1819-13[GP1-2 (0-2)]

"vlapon [2C]

11819-13[GP1-2 (0-2)]

Dicamba

19E1819-13[GP1-2 (0-2)]

Dicamba [2C]

19E1819-13[GP1-2 (0-2)]

Dichloroprop

19E1819-13[GP1-2 (0-2)]

Dichloroprop [2C]

19E1819-13[GP1-2 (0-2)]

Dinoseb

19E1819-13[GP1-2 (0-2)]

Dinoseb [2C]

19E1819-13[GP1-2 (0-2)]

MCPA

19E1819-13[GP1-2 (0-2)]

MCPA [2C]

19E1819-13[GP1-2 (0-2)]

WCPP

19E1819-13[GP1-2 (0-2)]

MCPP [2C]

19E1819-13[GP1-2 (0-2)]

#### L-11

Laboratory fortified blank/laboratory control sample was outside of control limits on the confirmation column, but within control limits on the primary column. All sample results are reported from the column within control criteria.

Analyte & Samples(s) Qualified:

2,4,5-T [2C]

B232364-BS1, B232364-BSD1

#### MS-12

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

2,4,5-T (2C)

B232364-MS1, B232364-MSD1



SW-846 8260C

## Qualifications:

L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Carbon Disulfide

B232391-BS1, B232391-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Chlorodibromomethane

B232391-BSI

Methyl tert-Butyl Ether (MTBE)

B232391-BSD1

Trichlorofluoromethane (Freon 11)

B232391-BSD1

L-07A

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

Acetone B232391-BS1

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

compound. Analyte & Samples(s) Qualified:

utanone (MEK)

19E1819-05[GP1-5 (11-13)], 19E1819-06[GP1-6 (11-13)], 19E1819-07[GP1-7 (10-12)], 19E1819-08[GP1-8 (10-12)], 19E1819-09[GP1-9 (11-13)], 19E1819-10[GP2-1 (6-8)], 19E1819-11[GP2-2 (7-9)], 19E1819-12[GP2-3 (7-9)], B232391-BLK1, B232391-BS1, B232391-BSD1

19E1819-05[GP1-5 (11-13)], 19E1819-06[GP1-6 (11-13)], 19E1819-07[GP1-7 (10-12)], 19E1819-08[GP1-8 (10-12)], 19E1819-09[GP1-9 (11-13)], 19E1819-10[GP2-1 (6-8)], 19E1819-11[GP2-2 (7-9)], 19E1819-12[GP2-3 (7-9)], 19E32391-BLK1, 19E32391-BS1, 19E32391-BSD1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene

19E1819-01[GP1-1 (11-13)], 19E1819-02[GP1-2 (11-13)], 19E1819-03[GP1-3 (11-13)], 19E1819-04[GP1-4 (11-13)], B232325-BLK1, B232325-BS1, B232325-BSD1, S036631-CCV1

Naphthalene

19E1819-01[GP1-1 (11-13)], 19E1819-02[GP1-2 (11-13)], 19E1819-03[GP1-3 (11-13)], 19E1819-04[GP1-4 (11-13)], 19E1819-05[GP1-5 (11-13)], 19E1819-05[GP1-5 (11-13)], 19E1819-07[GP1-7 (10-12)], 19E1819-08[GP1-8 (10-12)], 19E1819-09[GP1-9 (11-13)], 19E1819-10[GP2-1 (6-8)], 19E1819-11[GP2-2 (7-9)], 19E1819-12[GP2-3 (7-9)], 19E

V-16

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

result.
Analyte & Samples(s) Qualified:

1.4-Dioxano

19E1819-01[GP1-1 (11-13)], 19E1819-02[GP1-2 (11-13)], 19E1819-03[GP1-3 (11-13)], 19E1819-04[GP1-4 (11-13)], 19E1819-05[GP1-5 (11-13)], 19E1819-05[GP1-5 (11-13)], 19E1819-07[GP1-7 (10-12)], 19E1819-08[GP1-8 (10-12)], 19E1819-09[GP1-9 (11-13)], 19E1819-10[GP2-1 (6-8)], 19E1819-11[GP2-2 (7-9)], 19E1819-12[GP2-3 (7-9)], B232325-BLK1, B232325-BSD1, B232391-BLK1, B232391-BS1, B232391-B



7-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound. Analyte & Samples(s) Qualified:

1,1,1-Trichloroethane

B232325-BS1, B232325-BSD1, B232391-BS1, B232391-BSD1, S036631-CCV1, S036687-CCV1

1,1-Dichloroethylene

B232391-BS1, B232391-BSD1, S036687-CCV1

1,2-Dichloroethane

B232391-BS1, B232391-BSD1, S036687-CCV1

Carbon Disulfide

B232391-BS1, B232391-BSD1, S036687-CCV1

Carbon Tetrachloride

B232325-BS1, B232325-BSD1, B232391-BS1, B232391-BSD1, S036631-CCV1, S036687-CCV1

Trichlorofluoromethane (Freon 11)

B232325-BS1, B232325-BSD1, B232391-BS1, B232391-BSD1, S036631-CCV1, S036687-CCV1

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

## Bromomethane

 $19E1819-01[GP1-1\ (11-13)],\ 19E1819-02[GP1-2\ (11-13)],\ 19E1819-03[GP1-3\ (11-13)],\ 19E1819-04[GP1-4\ (11-13)],\ 19E1819-05[GP1-5\ (11-13)],\ 19E1819-06[GP1-6\ (11-13)],\ 19E1819-06[GP1$ (11-13)], 19E1819-07[GP1-7 (10-12)], 19E1819-08[GP1-8 (10-12)], 19E1819-09[GP1-9 (11-13)], 19E1819-10[GP2-1 (6-8)], 19E1819-11[GP2-2 (7-9)], 19E1819-12[GP2-3 (7-9)], B232325-BLK1, B232325-BS1, B232325-BSD1, B232391-BLK1, B232391-BS1, B232391-BSD1, S036631-CCV1, S036687-CCV1

## MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C 11-C22 aromatic e fraction in all samples in the batch. No significant modifications were made to the method.

## MADEP-VPH-Feb 2018 Rev 2.1

No significant modifications were made to the method. All VPH samples were received preserved properly in methanol with a soil/methanol ratio of 1:1 +/- 25% completely covered by methanol in the proper containers specified on the chain-of-custody form unless specified in this narrative.

Analytical column used for VPH analysis is Restek, Rtx-502.2, 105meter, 0.53mmlD, 3um df. Trap used for VPH analysis is Carbopack B/CarboSieveS-III.

SW-846 8260C

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington Technical Representative

na Watshugtan



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-1 (11-13)

Sampled: 5/28/2019 09:00

Sample ID: 19E1819-01
Sample Matrix: Soil

Volatile	Organic	Compounds	by	GC/MS

Analyte	Results	RL	Units	Dilution	Fing/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Benzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Bromobenzene	ND	0.0015	mg/Kg dry	ι		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Bromochloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Bromodichloromethane	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Bromoform	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Bromomethane	ND	0.0077	mg/Kg dry	1	V-34	SW-846 8260C	6/3/19	6/3/19 15:30	MFF
2-Butanone (MEK)	ND	0.031	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
n-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
sec-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
tert-Butylbenzene	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Carbon Disulfide	ND	0.0046	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Carbon Tetrachloride	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Chlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
hlorodibromomethane	ND	0.00077	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Chloroethane	ND	0.0077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Chloroform	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Chioromethane	ND	0.0077	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
2-Chlorotoluene	ND	0.0015	mg/Kg dry	l		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
4-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,2-Dibromoethane (EDB)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Dibromomethane	ND	0.0015	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,2-Dichlorobenzene	ND	0.0015	mg/Kg dry	l		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,3-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,4-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,1-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,2-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,1-Dichloroethylene	ND	0.0031	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
cis-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
trans-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	ì		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,2-Dichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 \$260C	6/3/19	6/3/19 15:30	MFF
1,3-Dichloropropane	ND	0.00077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
2,2-Dichloropropane	ND	0.0015	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,1-Dichloropropene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
cis-1,3-Dichloropropene	NĐ	0.00077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
ins-1,3-Dichloropropene	ND	0.00077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Diethyl Ether	ND	0.0077	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Diisopropyl Ether (DIPE)	ND	0.00077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,4-Dioxane	ND	0.077	mg/Kg dry	1	V-16	SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Ethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
		· · · · ·		-				Dog 13	

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roject Location: Beaver St., Waltham, MA

Sample Description:

102

70-130

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-1 (11-13)

Sampled: 5/28/2019 09:00

Sample ID: 19E1819-01 Sample Matrix: Soil

4-Bromofluorobenzene

·		Vo	latile Organic Comp	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Hexachlorobutadiene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
2-Hexanone (MBK)	ND	0.015	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Isopropylbenzene (Cumene)	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Methylene Chloride	ND	0.0077	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.015	mg/Kg dry	l		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Naphthalene	ND	1 800.0	mg/Kg dry	1	V-05	SW-846 8260C	6/3/19	6/3/19 15:30	MFF
n-Propylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Styrene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,1,1,2-Tetrachloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,1,2,2-Tetrachloroethane	ND	0.00077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Tetrachloroethylene	· ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Tetrahydrofuran	ND	0.0077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Toluene	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,2,3-Trichlorobenzene	ND	0.0015	mg/Kg dry	t		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
2,4-Trichlorobenzene	ND	0.0015	mg/Kg dry	1	V-05	SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,1,1-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,1,2-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Trichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,2,3-Trichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,2,4-Trimethylbenzene	ND	0.0015	mg/Kg dry	I		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
1,3,5-Trimethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Vinyl Chloride	ND	0.0077	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
m+p Xylene	ND	0.0031	mg/Kg dry	I		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
o-Xylene	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:30	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual			····	
1,2-Dichloroethane-d4		114	70-130					6/3/19 15:30	***************************************
Toluene-d8		95.8	70-130					6/3/19 15:30	

6/3/19 15:30



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-1 (11-13)

Sampled: 5/28/2019 09:00

Petroleum Hydrocarbons Analyses - EPH												
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst			
C9-C18 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
C19-C36 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg đry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Accnaphthylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Benzo(a)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Benzo(a)pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	ı		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Chrysene	ND	0.10	mg/Kg dry	l		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Fluoranthene	ND	0.10	mg/Kg dry	ı		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Fluorene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
ideno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
2-Methylnaphthalene	ND	0.10	mg/Kg dry	ł		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Naphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Phenanthrene	ND	0.10	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Pyrene	ND	0.10	mg/Kg dry	ı		MADEP-EPH-04-1.1	6/3/19	6/5/19 18:29	RMW			
Surrogates		% Recovery	Recovery Limits	5	Flag/Qual							
Chlorooctadecane (COD)		73.7	40-140					6/5/19 18:29				
o-Terphenyl (OTP)		79.8	40-140					6/5/19 18:29				
2-Bromonaphthalene		96.4	40-140					6/5/19 18:29				
2-Fluorobiphenyl		104	40-140					6/5/19 18:29				



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-1 (11-13)

Sampled: 5/28/2019 09:00

Sample Flags: O-01		Pet	roleum Hydrocarbo	ns Analyses	- VPH	•			
Soil/Methanol Preservation Ratio: 1.39							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	7.8	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 1:22	КМВ
C5-C8 Aliphatics	ND	7.8	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	KMB
Unadjusted C9-C12 Aliphatics	ND	7.8	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	KMB
C9-C12 Aliphatics	ND	7.8	mg/Kg dry	ı		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	KMB
C9-C10 Aromatics	ND	7.8	mg/Kg dry	ī		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	KMB
Benzene	ND	0.039	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	КМВ
Ethylbenzene	ND	0.039	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	KMB
Methyl tert-Butyl Ether (MTBE)	ND	0.039	mg/Kg dry	1		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	KMB
Naphthalene	ND	0.20	mg/Kg dry	I		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	КМВ
Toluene	ND	0.039	mg/Kg dry	ı		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 1:22	KMB
m+p Xylene	ND	0.078	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	KMB
o-Xylene	ND	0.039	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:22	КМВ
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
5-Dibromotoluene (FID)		99.5	70-130					6/4/19 1:22	
2,5-Dibromotoluene (PID)		97.4	70-130					6/4/19 1:22	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GPI-1 (11-13)

Sampled: 5/28/2019 09:00

A	<b>L</b> nalyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Arsenic		ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Barium		43	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Beryllium		0.26	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Cadmium		ND	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Chromium		9.0	0.35	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Lead		5.0	0.52	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Mercury		ND	0.026	mg/Kg dry	ı		SW-846 7471B	6/6/19	6/7/19 10:34	AJL
Nickel		8.0	0.35	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Selenium		ND	3.5	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Silver		ND	0.35	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Thallium		ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Vanadium		28	0.70	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 21:16	EJB
Zinc		41	0.70	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:16	EJB



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP1-1 (11-13)

Sampled: 5/28/2019 09:00

Sample ID: 19E1819-01
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	96.4		% Wt	ı		SM 2540G	6/5/19	6/5/19 15:52	IDN



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-2 (11-13)

Sampled: 5/28/2019 10:00

Sample Matrix: Soil  Volatile Organic Compounds by GC/MS												
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst			
Acelone	ND	0.081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
tert-Amyl Methyl Ether (TAME)	ND	0.00081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Велгене	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Bromobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Bromochloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Bromodichloromethane	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Bromoform	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Bromomethane	ND	0.0081	mg/Kg dry	I	V-34	SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
2-Butanone (MEK)	ND	0.032	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
n-Butylbenzene	ND	0.0016	mg/Kg đry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
sec-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
tert-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
tert-Butyl Ethyl Ether (TBEE)	ND	0.00081	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Carbon Disulfide	ND	0.0049	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Carbon Tetrachloride	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Chlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
hlorodibromomethane	ND	0.00081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Chloroethane	ND	0.0081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Chloroform	ND	0.0032	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Chloromethane	ND	0.0081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
2-Chlorotoluene	ND	0.0016	mg/Kg dry	ī		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
4-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,2-Dibromoethane (EDB)	ND	18000.0	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Dibromomethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,2-Dichlorobenzene	ND	0.0016	mg/Kg dry	ī		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,3-Dichlorobenzene	ND	0.0016	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,4-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Dichlorodifluoromethane (Freon 12)	ND	0.0081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,1-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,2-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,1-Dichloroethylene	ND	0.0032	mg/Kg dry	t		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
cis-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
trans-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,2-Dichloropropane	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,3-Dichloropropane	ND	0.00081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
2,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,1-Dichloropropene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
cis-1,3-Dichloropropene	ND	0.00081	mg/Kg dry			SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
trans-1,3-Dichloropropene	ND	0.00081	mg/Kg dry			SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Diethyl Ether	ND	0.0081	mg/Kg dry			SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
Diisopropyl Ether (DIPE)	ND	0.00081	mg/Kg dry			SW-846 8260C	6/3/19	6/3/19 15:55	MFF			
1,4-Dioxane	ND	0.081	mg/Kg dry		V-16	SW-846 8260C	6/3/19	6/3/19 15:55				
Ethylbenzene	ND	0.0016	mg/Kg dry			SW-846 8260C	6/3/19	6/3/19 15:55				
La la la la la la la la la la la la la la	ND	0.0010		•				Page 19				



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-2 (11-13)

Sampled: 5/28/2019 10:00

•	Vo	olatile Organic Com							
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0016	mg/Kg dry	l		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
2-Hexanone (MBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Isopropylbenzene (Cumene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0032	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Methylene Chloride	ND	0.0081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.016	mg/Kg dry	ì		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Naphthalene	ND	0.0032	mg/Kg dry	1	V-05	SW-846 8260C	6/3/19	6/3/19 15:55	MFF
n-Propylbenzene	ND	0.0016	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Styrene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
1,1,1,2-Tetrachloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
1,1,2,2-Tetrachloroethane	ND	0.00081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Tetrachloroethylene	ND ·	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Tetrahydrofuran	ND	0.0081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Toluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
1,2,3-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
2,4-Trichlorobenzene	ND	0.0016	mg/Kg dry	1	V-05	SW-846 8260C	6/3/19	6/3/19 15:55	MFF
1,1,1-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
1,1,2-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Trichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
1,2,3-Trichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
1,2,4-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
1,3,5-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Vinyl Chloride	ND	0.0081	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
m+p Xylene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
o-Xylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 15:55	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		108	70-130		· · · · ·			6/3/19 15:55	
Toluene-d8		99.8	70-130					6/3/19 15:55	
4-Bromofluorobenzene		110	70-130					6/3/19 15:55	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-2 (11-13)

Sampled: 5/28/2019 10:00

Sample Matrix: Soil		Petr	oleum Hydrocarbo	ns Analyses	- EPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	ī		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Acenaphthylene	ND	0.11	mg/Kg dry	l		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Benzo(a)anthracene	ND	0.11	mg/Kg dry	ı		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	ī		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Chrysene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Fluorene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
ndeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Phenanthrene	ND	0.11	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Pyrene	ND	0.11	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:26	RMW
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
Chlorooctadecane (COD)		73.2	40-140					6/5/19 19:26	
o-Terphenyl (OTP)		87.1	40-140					6/5/19 19:26	
2-Bromonaphthalene		107	40-140					6/5/19 19:26	
2-Fluorobiphenyl		113	40-140					6/5/19 19:26	



.oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP1-2 (11-13)

Sampled: 5/28/2019 10:00

Sample Flags: O-01		Pet	roleum Hydrocarbo	ıns Analyses	- VPH				
Soil/Methanol Preservation Ratio: 1.30							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	9.2	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:51	КМВ
C5-C8 Aliphatics	ND	9.2	mg/Kg dry	I		MADEP-VPH-Fcb 2018 Rcv 2.1	6/3/19	6/4/19 1:51	KMB
Unadjusted C9-C12 Aliphatics	ND	9.2	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:51	КМВ
C9-C12 Aliphatics	ND	9.2	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:51	КМВ
C9-C10 Aromatics	ND	9.2	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:51	KMB
Benzene	ND	0.046	mg/Kg dry	I		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:51	KMB
Ethylbenzene	ND	0.046	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:51	KMB
Methyl tert-Butyl Ether (MTBE)	ND	0.046	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rcv 2.1	6/3/19	6/4/19 1:51	KMB
Naphthalene	ND	0.23	mg/Kg dry	1		MADEP-VPII-Fcb 2018 Rev 2.1	6/3/19	6/4/19 1:51	KMB
Toluene	ND	0.046	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 1:51	КМВ
m+p Xylene	ND	0.092	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 1:51	КМВ
o-Xylene	ND	0.046	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 1:51	КМВ
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
2,5-Dibromotoluene (FID)		97.3	70-130					6/4/19 1:51	
2,5-Dibromotoluene (PID)		94.4	70-130					6/4/19 1:51	



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-2 (11-13)

Sampled: 5/28/2019 10:00

	Metals Analyses (Total)									
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	1.8	mg/Kg dry	I	MS-07	SW-846 6010D	6/5/19	6/6/19 21:12	ЕЈВ
Arsenic		4.2	1.8	mg/Kg dry	1	R-04	SW-846 6010D	6/5/19	6/6/19 21:12	ЕЈВ
Barium		18	1.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Beryllium		0.19	0.18	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Cadmium		0.27	0.18	mg/Kg dry	1	R-04	SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Chromium		6.6	0.36	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Lead		9.2	0.54	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Mercury		ND	0.026	mg/Kg dry	1		SW-846 7471B	6/6/19	6/7/19 10:29	AJL
Nickel		5.6	0.36	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Sclenium		ND	3.6	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Silver		ND	0.36	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Thallium		ND	1.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Vanadium		14	0.72	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB
Zinc		21	0.72	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:12	EJB



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-2 (11-13)

Sampled: 5/28/2019 10:00

Sample ID: 19E1819-02
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		92.2		% Wı	1		SM 2540G	6/5/19	6/5/19 15:46	JDN



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-3 (11-13)

Sampled: 5/28/2019 10:50

Sample ID: 19E1819-03
Sample Matrix: Soil

Volatile Organic Con	npounds by G	C/MS				
Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acetone	ND	0.064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Benzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Bromobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Bromochloromethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Bromodichloromethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Bromoform	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Bromomethane	ND	0.0064	mg/Kg dry	i	V-34	SW-846 8260C	6/3/19	6/3/19 16:19	MFF
2-Bulanone (MEK)	ND	0.026	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
n-Butylbenzene	ND	0.0013	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
sec-Butylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
tert-Butylbenzene	ND	0.0013	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00064	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Carbon Disulfide	ND	0.0038	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Carbon Tetrachloride	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Chlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
hlorodibromomethane	ND	0.00064	mg/Kg dry	I		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Chloroethane	ND	0.0064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Chloroform	ND	0.0026	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Chloromethane	ND	0.0064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
2-Chlorotoluene	ND	0.0013	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
4-Chlorotolucne	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,2-Dibromoethane (EDB)	ND -	0.00064	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Dibromomethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,2-Dichlorobenzene	ND	0.0013	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,3-Dichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,4-Dichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,1-Dichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,2-Dichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,1-Dichloroethylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
cis-1,2-Dichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
trans-1,2-Dichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,2-Dichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,3-Dichloropropane	ND	0.00064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
2,2-Dichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,1-Dichloropropene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
cis-1,3-Dichloropropene	ND	0.00064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
rans-1,3-Dichloropropene	ND	0.00064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Diethyl Ether	ND	0.0064	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Diisopropyl Ether (DIPE)	ND	0.00064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,4-Dioxane	ND	0.064	mg/Kg dry	1	V-16	SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Ethylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
								Page 25	of 153

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roject Location: Beaver St., Waltham, MA

Sample Description:

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70-130

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-3 (11-13)

Sampled: 5/28/2019 10:50

Sample ID: 19E1819-03 Sample Matrix: Soil

4-Bromofluorobenzene

		V	olatile Organic Com	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analy:
Hexachlorobuladiene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
2-Hexanone (MBK)	ND	0.013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Isopropylbenzene (Cumene)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0026	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Methylene Chloride	ND	0.0064	mg/Kg đry	I		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Naphthalene	ND	0.0026	mg/Kg dry	1	V-05	SW-846 8260C	6/3/19	6/3/19 16:19	MFF
n-Propyibenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Styrene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,1,1,2-Tetrachloroethane	ND	0.0013	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,1,2,2-Tetrachlorocthane	ND	0.00064	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Tetrachloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Tetrahydrofuran	ND	0.0064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Toluene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,2,3-Trichlorobenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
,2,4-Trichlorobenzene	ND	0.0013	mg/Kg dry	1	V-05	SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,1,1-Trichloroethane	ND	0.0013	mg/Kg dry	I		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,1,2-Trichloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Trichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0064	mg/Kg đry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,2,3-Trichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,2,4-Trimethylbenzene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
1,3,5-Trimethylbenzene	ND	0.0013	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Vinyl Chloride	ND	0.0064	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
n+p Xylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
-Xylene	ND	0.0013	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 16:19	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
,2-Dichloroethane-d4		107	70-130					6/3/19 16:19	
Foluene-d8		97.8	70-130					6/3/19 16:19	

6/3/19 16:19



a roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-3 (11-13)

Sampled: 5/28/2019 10:50

Samore Matrix. Don.		P	etroleum Hydrocarbon	ıs Analyses -	EPH				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
C9-C18 Aliphatics	ND	10	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
C19-C36 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Acenaphthylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Benzo(a)anthracene	ND	0.10	mg/Kg dry	ì		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Benzo(a)pyrene	ND	0.10	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	ı		MADEP-EPII-04-1.1	6/3/19	6/5/19 19:45	RMW
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Chrysene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
luorene	ND	0.10	mg/Kg dry	I		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
.ndeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
2-Methylnaphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Naphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Phenanthrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/5/19 19:45	RMW
Surrogates	A.M. OF V.	% Recovery	Recovery Limits	I	Flag/Qual				
Chlorooctadccanc (COD)		73.1	40-140					6/5/19 19:45	
o-Terphenyl (OTP)		79.7	40-140					6/5/19 19:45	
2-Bromonaphthalene		101	40-140					6/5/19 19:45	
2-Fluorobiphenyl		109	40-140					6/5/19 19:45	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP1-3 (11-13) Sample ID: 19E1819-03

Sampled: 5/28/2019 10:50

Sample Matrix: Soil

Sample Flags: O-01		Per	troleum Hydrocarbo	ons Analyses	- VPH				
Soil/Methanol Preservation Ratio: 1.48  Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	414
			Onts	Ditution	Ling/Quai	Metrod	Prepared	Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	7.5	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:21	КМВ
C5-C8 Aliphatics	ND	7.5	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rcv 2.1	6/3/19	6/4/19 2:21	KMB
Unadjusted C9-C12 Aliphatics	ND	7.5	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:21	KMB
C9-C12 Aliphatics	ND	7.5	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:21	KMB
C9-C10 Aromatics	ND	7.5	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:21	KMB
Benzene	ND	0.038	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:21	KMB
Ethylbenzene	ND	0.038	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:21	КМВ
Methyl tert-Butyl Ether (MTBE)	ND	0.038	mg/Kg dry	1		MADEP-VPII-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:21	КМВ
Naphthalene	ND	0.19	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:21	KMB
Toluene	ND	0.038	mg/Kg dry	I		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:21	KMB
m+p Xylene	ND	0.075	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:21	KMB
o-Xylene	ND	0.038	mg/Kg dry	i		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:21	KMB
Surrogates		% Recovery	Recovery Limits	i	Flag/Qual				
5-Dibromotoluene (FID)		103	70-130					6/4/19 2:21	
2,5-Dibromotoluene (PID)		98.6	70-130					6/4/19 2:21	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-3 (11-13)

Sampled: 5/28/2019 10:50

				Metals Analy	ses (Total)					
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Arsenic		ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Barium		19	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Beryllium		0.18	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Cadmium		ND	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Chromium		5.2	0.34	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Lead		2.5	0.51	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Mercury		ND	0.025	mg/Kg dry	1		SW-846 7471B	6/6/19	6/7/19 10:35	AJL
Nickel		4.5	0.34	mg/Kg dry	I		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Sclenium		ND	3.4	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Silver		ND	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Thallium		ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Vanadium		14	0.68	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB
Zinc		21	0.68	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:23	EJB



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-3 (11-13)

Sampled: 5/28/2019 10:50

Sample ID: 19E1819-03
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	95.4		% Wı	1		SM 2540G	6/5/19	6/5/19 15:47	JDN



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-4 (11-13)

Sampled: 5/28/2019 11:40

			Volatile Organic Con	pounds by G	C/MS				•
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acetone	ND	0.062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Benzene	ND	0.0012	mg/Kg dry	ì		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Bromobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Bromochioromethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	-6/3/19	6/3/19 16:44	MFF
Bromodichloromethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Bromoform	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Bromomethane	ND	0.0062	mg/Kg dry	1	V-34	SW-846 8260C	6/3/19	6/3/19 16:44	MFF
2-Butanone (MEK)	ND	0.025	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
n-Butylbenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
sec-Butylbenzene	ND	0.0012	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
tert-Butylbenzene	ND	0.0012	mg/Kg dry	ì		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Carbon Disulfide	ND	0.0037	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Carbon Tetrachloride	ND	0.0012	mg/Kg dry	I		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Chlorobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Chlorodibromomethane	ND	0.00062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Chloroethane	ND	0.0062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Chloroform	ND	0.0025	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Chloromethane	ND	0.0062	mg/Kg dry	I		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
2-Chlorotoluene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
4-Chlorotolucne	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,2-Dibromoethane (EDB)	ND	0.00062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Dibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,2-Dichlorobenzene	ND	0.0012	mg/Kg dry	i		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,3-Dichlorobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,4-Dichlorobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,1-Dichloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
1,2-Dichloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
1,1-Dichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
cis-1,2-Dichloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
trans-1,2-Dichloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
1,2-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
1,3-Dichloropropane	ND	0.00062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
2,2-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
1,1-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
cis-1,3-Dichloropropene	ND	0.00062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	
trans-1,3-Dichloropropene	. ND	0.00062	mg/Kg dry	, 1		SW-846 8260C	6/3/19	6/3/19 16:44	
Diethyl Ether	ND	0.0062	mg/Kg dry	, 1		SW-846 8260C	6/3/19	6/3/19 16:44	
Diisopropyl Ether (DIPE)	ND	0.00062	mg/Kg dry	, 1		SW-846 8260C	6/3/19	6/3/19 16:4	
1,4-Dioxane	ND	0.062	mg/Kg dry	, 1	V-16	SW-846 8260C	6/3/19	6/3/19 16:4	
Ethylbenzene	ND	0.0012	mg/Kg dry	y 1		SW-846 8260C	6/3/19	6/3/19 16:4	
								Page 3	1 01 153



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP1-4 (11-13) Sample ID: 19E1819-04

Sampled: 5/28/2019 11:40

Sample Matrix: Soil

		Vo	olatile Organic Com	pounds by G	C/MS		****	· • • • • • • • • • • • • • • • • • • •	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
2-Hexanone (MBK)	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Isopropylbenzene (Cumene)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0025	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Methylene Chloride	ND	0.0062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Naphthalene	ND	0.0025	mg/Kg dry	ı	V-05	SW-846 8260C	6/3/19	6/3/19 16:44	MFF
n-Propylbenzene	ND	0.0012	mg/Kg dry	ı		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Styrene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,1,1,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,1,2,2-Tetrachloroethane	ND	0.00062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Tetrachloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Tetrahydrofuran	ND	0.0062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Toluene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,2,3-Trichlorobenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
2,4-Trichlorobenzene	ND	0.0012	mg/Kg dry	i	V-05	SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,1,1-Trichloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,1,2-Trichloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Trichloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,2,3-Trichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,2,4-Trimethylbenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
1,3,5-Trimethylbenzene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Vinyl Chloride	ND	0.0062	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
m+p Xylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
o-Xylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/3/19	6/3/19 16:44	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		109	70-130					6/3/19 16:44	***************************************
Toluene-d8		99.0	70-130					6/3/19 16:44	
4-Bromofluorobenzene		113	70-130					6/3/19 16:44	



roject Location: Beaver St., Waltham, MA

Sample Description:

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Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-4 (11-13)

Sampled: 5/28/2019 11:40

Sample ID: 19E1819-04
Sample Matrix: Soil

2-Fluorobiphenyl

		Pet	roleum Hydrocarbo	ns Analyses	- EPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	
C9-C18 Aliphatics	ND	10	mg/Kg dry	l	rag/Quar	MADEP-EPH-04-1.1	Prepared	Analyzed	Analys
C19-C36 Aliphatics	ND	10					6/3/19	6/7/19 0:36	KLB
Unadjusted C11-C22 Aromatics	ND		mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
C11-C22 Aromatics		10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
	ND	10	mg/Kg dry	1 .		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Acenaphthylene	ИD	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Anthracene	ND	0.10	mg/Kg dry	I		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Benzo(a)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Benzo(a)pyrene	ND	0.10	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Chrysene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Fluorene	ND	0.10	mg/Kg dry	ı		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
deno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
2-Methylnaphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Naphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Phenanthrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:36	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				·
Chlorooctadecane (COD)		69.5	40-140					6/7/19 0:36	
o-Terphenyl (OTP)		78.6	40-140					6/7/19 0:36	
2-Bromonaphthalene		103	40-140					6/7/19 0:36	

40-140

6/7/19 0:36



ject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-4 (11-13)

Sampled: 5/28/2019 11:40

Sample ID: 19E1819-04

Sample Flags: O-01		Petr	oleum Hydrocarbo	ns Analyses	- VPH		•		
Soil/Methanol Preservation Ratio: 1.40							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	7.7	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:50	КМВ
C5-C8 Aliphatics	ND	7.7	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:50	КМВ
Unadjusted C9-C12 Aliphatics	ND	7.7	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:50	KMB
C9-C12 Aliphatics	ND	7.7	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:50	КМВ
C9-C10 Aromatics	ND	7.7	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:50	КМВ
Benzene	ND	0.038	mg/Kg dry	i		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:50	KMB
Ethylbenzene	ND	0.038	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:50	KMB
Methyl tert-Butyl Ether (MTBE)	ND	0.038	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:50	KMB
Naphthalene	ND	0.19	mg/Kg dry	ŧ		MADEP-VPII-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:50	KMB
Toluene	ND	0.038	mg/Kg dry	l		MADEP-VPII-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:50	KMB
m+p Xylene	ND	0.077	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 2:50	КМВ
o-Xylene	ND	0.038	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 2:50	КМВ
Surrogates		% Recovery	Recovery Limits	5	Flag/Qual				



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-4 (11-13)

Sampled: 5/28/2019 11:40

			Metals Analy	/ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Arsenic	ND	1.7	mg/Kg dry	I		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Barium	39	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Beryllium	0.24	0.17	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Cadmium	ND	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	ЕЈВ
Chromium	7.2	0.35	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Lead	5.8	0.52	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Mercury	ND	0.024	mg/Kg dry	1		SW-846 7471B	6/6/19	6/7/19 10:37	AJL
Nickel	8.5	0.35	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Sclenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Vanadium	25	0.69	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB
Zinc	38	0.69	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:28	EJB



ject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-4 (11-13)

Sampled: 5/28/2019 11:40

Conventional Chemistry Para	neters by EPA/APH	A/SW-846 Methods	(Total)

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	97.1		% Wı	1		SM 2540G	6/5/19	6/5/19 15:47	JDN



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-5 (11-13)

Sampled: 5/28/2019 13:00

•		1	olatile Organic Con	ipounds by G	C/MS	•			
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acelone	ND	0.069	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 7:23	MFF
ert-Amyl Methyl Ether (TAME)	ND	0.00069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Benzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Bromobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Bromochloromethane	ND	0.0014	mg/Kg dry	l		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Bromodichloromethane	ND	0.0014	mg/Kg dry	ι		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Bromoform	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Bromomethane	ND	0.0069	mg/Kg dry	ì	V-34	SW-846 8260C	6/4/19	6/4/19 7:23	MFF
-Butanone (MEK)	ND	0.028	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 7:23	MFF
-Butylbenzene	ND	0.0014	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
ec-Butylbenzene	ИD	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
ert-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
ert-Butyl Ethyl Ether (TBEE)	ND	0.00069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Carbon Disulfide	ND	0.0042	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Carbon Tetrachloride	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Chlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
hlorodibromomethane	ND	0.00069	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Chloroethane	ND	0.0069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Chloroform	ND	0.0028	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Chloromethane	ND	0.0069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
2-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
I-Chlorotoluene	ND	0.0014	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0014	mg/Kg dry	ī		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,2-Dibromoethane (EDB)	ND	0.00069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Dibromomethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,2-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,3-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
I,4-Dichlorobenzene				1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	
1,1-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	
1,2-Dichloroethane	ND	0.0014	mg/Kg dry	,		SW-846 8260C	6/4/19	6/4/19 7:23	
1,1-Dichloroethylene	ND	0.0028	mg/Kg dry			SW-846 8260C	6/4/19	6/4/19 7:23	
cis-1,2-Dichloroethylenc	ND	0.0014	mg/Kg dry	1			6/4/19		
trans-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23 6/4/19 7:23	
1,2-Dichloropropane	ND	0.0014	mg/Kg dry			SW-846 8260C		6/4/19 7:23	
1,3-Dichloropropane	ND	0.00069	mg/Kg dry			SW-846 8260C	6/4/19		
2,2-Dichloropropane	ND	0.0014	mg/Kg dry			SW-846 8260C	6/4/19	6/4/19 7:23	
1,1-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	
eis-1,3-Dichloropropene	ND	0.00069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	
trans-1,3-Dichloropropene	ND	0.00069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	
Diethyl Ether	ND	0.0069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:2:	
Diisopropyl Ether (DIPE)	ND	0.00069	mg/Kg dry	, l		SW-846 8260C	6/4/19	6/4/19 7:2:	3 MF
1,4-Dioxane	ND	0.069	mg/Kg dry	r 1	V-16	SW-846 8260C	6/4/19	6/4/19 7:2	3 MF
Ethylbenzene	ND	0.0014	mg/Kg dry	, 1		SW-846 8260C	6/4/19	6/4/19 7:2	3 MF



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-5 (11-13)

Sampled: 5/28/2019 13:00

		· Vo	olatile Organic Com	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
2-Hexanone (MBK)	ND	0.014	mg/Kg dry	ī		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Isopropylbenzene (Cumene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0028	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Methylene Chloride	ND	0.0069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.014	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Naphthalene	ND	0.0028	mg/Kg dry	1	V-05	SW-846 8260C	6/4/19	6/4/19 7:23	MFF
n-Propylbenzene	ND	0.0014	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Styrene	ND	0.0014	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,1,1,2-Tetrachloroethane	ND	0.0014	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,1,2,2-Tetrachloroethane	ND	0.00069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Tetrachloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Tetrahydrofuran	ND	0.0069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Toluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,2,3-Trichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
2,4-Trichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
.,1,1-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,1,2-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Trichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,2,3-Trichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,2,4-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
1,3,5-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Vinyl Chloride	ND	0.0069	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
m+p Xylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
o-Xylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:23	MFF
Surrogates		% Recovery	Recovery Limits	3	Flag/Qual				
1,2-Dichloroethane-d4		103	70-130					6/4/19 7:23	
Toluene-d8		98.9	70-130					6/4/19 7:23	
4-Bromofluorobenzene		104	70-130					6/4/19 7:23	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-5 (11-13)

Sampled: 5/28/2019 13:00

		Pet	roleum Hydrocarbo	ns Analyses	- EPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
C11-C22 Aromatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Accnaphthylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Benzo(g,h,i)perylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Chrysene	. ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
'ndeno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPI1-04-1.1	6/3/19	6/7/19 0:55	KLB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 0:55	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Quai				
Chlorooctadecane (COD)		81.3	40-140	·				6/7/19 0:55	
o-Terphenyl (OTP)		91.5	40-140					6/7/19 0:55	
2-Bromonaphthalene		118	40-140					6/7/19 0:55	
2-Fluorobiphenyl		128	40-140					6/7/19 0:55	



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-5 (11-13)

Sampled: 5/28/2019 13:00

Sample Flags: O-01	•	Peti	oleum Hydrocarbo	ns Analyses	- VPH			•	
Soil/Methanol Preservation Ratio: 1.41  Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	8.0	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 3:20	КМВ
C5-C8 Aliphatics	ND	8.0	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rcv 2.1	6/3/19	6/4/19 3:20	КМВ
Unadjusted C9-C12 Aliphatics	ND	8.0	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:20	KMB
C9-C12 Aliphatics	ND	8.0	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:20	KMB
C9-C10 Aromatics	ND	8.0	mg/Kg dry	i		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:20	KMB
Benzene	ND	0.040	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:20	KMB
Ethylbenzene	ND	0.040	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:20	KMB
Methyl tert-Butyl Ether (MTBE)	ND	0.040	mg/Kg dry	i		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 3:20	KMB
Naphthalene	ND	0.20	mg/Kg dry	t		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:20	КМВ
Toluene	ND	0.040	mg/Kg dry	1		MADEP-VP11-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:20	КМВ
m+p Xylene	ND	0.080	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:20	КМВ
o-Xylene	ND	0.040	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 3:20	КМВ
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
2,5-Dibromotoluene (FID)		103	70-130					6/4/19 3:20	
2,5-Dibromotoluene (PID)		98.5	70-130					6/4/19 3:20	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-5 (11-13)

Sampled: 5/28/2019 13:00

	•		Metals Analy	ses (Total)				•	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Arsenic	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Barium	29	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Beryllium	0.19	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Cadmium	ND	0.17	mg/Kg dry	I		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Chromium	7.3	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Lead	3.9	0.51	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	6/6/19	6/7/19 10:39	AJL
Nickel	6.6	0.34	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Sclenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Silver	ND	0.34	mg/Kg dry	L		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Vanadium	19	0.68	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:45	EJB
Zinc	27	0.68	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:45	EJB



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-5 (11-13)

Sampled: 5/28/2019 13:00

Sample ID: 19E1819-05 Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		94.8		% Wt	ı		SM 2540G	6/5/19	6/5/19 15:47	JDN

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

ject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-6 (11-13)
Sample ID: 19E1819-06

Sampled: 5/28/2019 13:50

Sample Matrix: Soil

·			Volatile Organic Con	npounds by G	C/MS	•			
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acetone	ND	0.078	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 7:48	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Benzene	ND	0.0016	mg/Kg dry	ì		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Bromobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Bromochloromethane	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Bromodichloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Bromoform	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Bromomethane	ND	0.0078	mg/Kg dry	1	V-34	SW-846 8260C	6/4/19	6/4/19 7:48	MFF
2-Butanone (MEK)	ND	0.031	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 7:48	MFF
n-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
sec-Butylbenzene	ND	0.0016	mg/Kg dry	ŧ		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
tert-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Carbon Disulfide	ND	0.0047	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Carbon Tetrachloride	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Chlorobenzene	ND	0.0016	mg/Kg dry	t		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Ylorodibromomethane	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
_hloroethane	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Chloroform	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Chloromethane	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
2-Chlorotoluene	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
4-Chlorotoluene	ND	0.0016	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2-Dibromoethane (EDB)	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Dibromomethane	ND	0.0016	mg/Kg dry	Ţ		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,3-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,4-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,1-Dichloroethane	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2-Dichloroethane	ND	0.0016	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,1-Dichloroethylene	ND	0.0031	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
cis-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
trans-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,3-Dichloropropane	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
2,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,1-Dichloropropene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
cis-1,3-Dichloropropene	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
trans-1,3-Dichloropropene	ND	0.00078	mg/Kg dry	. 1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Diethyl Ether	ND	0.0078	mg/Kg dry	· l		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Diisopropyl Ether (DIPE)	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,4-Dioxane	ND	0.078	mg/Kg dry	, 1	V-16	SW-846 8260C	6/4/19	6/4/19 7:48	B MFF
Ethylbenzene	ND	0.0016	mg/Kg dry	, I		SW-846 8260C	6/4/19	6/4/19 7:43	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Jate Received: 5/31/2019 Field Sample #: GP1-6 (11-13)

Sampled: 5/28/2019 13:50

		Vo	latile Organic Com	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
2-Hexanone (MBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Isopropylbenzene (Cumene)	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0016	mg/Kg dry	ì		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Methylene Chloride	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.016	mg/Kg đry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Naphthalene	ND	0.0031	mg/Kg dry	1	V-05	SW-846 8260C	6/4/19	6/4/19 7:48	MFF
n-Propylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Styrene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,1,1,2-Tetrachloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,1,2,2-Tetrachloroethane	ND	0.00078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Tetrachloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Tetrahydrofuran	ND	0.0078	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Toluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2,3-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2,4-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
,1,1-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,1,2-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Trichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2,3-Triehloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,2,4-Trimethylbenzene	ND	0.0016	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
1,3,5-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Vinyl Chloride	ND	0.0078	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
m+p Xylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
o-Xylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 7:48	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		106	70-130				-	6/4/19 7:48	
Toluene-d8		101	70-130					6/4/19 7:48	
4-Bromofluorobenzene		105	70-130					6/4/19 7:48	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-6 (11-13)

Sampled: 5/28/2019 13:50

Analyte	Results	RL	¥1-14-	Distr.	FI/0	25.00	Date	Date/Time	
			Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
C9-C18 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
C19-C36 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
C11-C22 Aromatics	ND	10 -	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Acenaphthylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPII-04-1.1	6/3/19	6/7/19 1:14	KLB
Benzo(a)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Benzo(a)pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Chrysene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Fluorene	ND	0.10	mg/Kg dry	ī		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
ndeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	t		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
2-Methylnaphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Naphthalene	ND	0.10	mg/Kg dry	ī		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Phenanthrene	ND	0.10	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Pyrene	ND	0.10	mg/Kg dry	t		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:14	KLB
Surrogates		% Recovery	Recovery Limits	5	Flag/Qual		······································	****	
Chlorooctadecane (COD)		71.1	40-140		<del>V</del>		· · · · · · · · · · · · · · · · · · ·	6/7/19 1:14	
o-Terphenyl (OTP)		78.4	40-140					6/7/19 1:14	
2-Bromonaphthalene		117	40-140					6/7/19 1:14	
2-Fluorobiphenyl		125	40-140					6/7/19 1:14	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-6 (11-13)

Sampled: 5/28/2019 13:50

Sample ID: 19E1819-06

Sample Flags: O-01		Petroleum Hydrocarbons Analyses - VPH							
Soil/Methanol Preservation Ratio: 1.51							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	7.6	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	КМВ
C5-C8 Aliphatics	ND	7.6	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rcv 2.1	6/3/19	6/4/19 3:49	КМВ
Unadjusted C9-C12 Aliphatics	ND	7.6	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	КМВ
C9-C12 Aliphatics	ND	7.6	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	КМВ
C9-C10 Aromatics	ND	7.6	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	KMB
Benzene	ND	0.038	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	KMB
Ethylbenzene	ND	0.038	mg/Kg dry	i		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	KMB
Methyl tert-Butyl Ether (MTBE)	ND	0.038	mg/Kg dry	1		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	KMB
Naphthalene	ND	0.19	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 3:49	КМВ
Toluene	ND	0.038	mg/Kg dry	1		MADEP-VPII-Fcb 2018 Rev 2.1	6/3/19	6/4/19 3:49	КМВ
m+p Xylene	ND	0.076	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	КМВ
o-Xylene	ND	0.038	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 3:49	КМВ
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
2,5-Dibromotoluene (FID)		97.6	70-130		•			6/4/19 3:49	
2.5-Dibromotoluene (PID)		96.7	70-130					6/4/19 3:49	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-6 (11-13)

Sampled: 5/28/2019 13:50

	·		Metals Analy	ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Arsenic	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Barium	24	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Beryllium	0.20	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Cadmium	ND	0.17	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Chromium	6.7	0.34	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Lead	3.7	0.51	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Mercury	ND	0.025	nig/Kg dry	ı		SW-846 7471B	6/6/19	6/7/19 10:40	AJL
Nickel	6.7	0.34	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Sclenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Vanadium	21	0.68	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:50	EJB
Zinc	28	0.68	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:50	EJB



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-6 (11-13)

Sampled: 5/28/2019 13:50

Sample ID: 19E1819-06
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		95.0		% Wı	1		SM 2540G	6/5/19	6/5/19 15:47	JDN



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-7 (10-12)

Sampled: 5/28/2019 14:55

Sample ID: 19E1819-07

		•	Volatile Organic Con	npounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aceione	ND	0.12	mg/Kg dry	i	R-05	SW-846 8260C	6/4/19	6/4/19 8:12	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Benzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Bromobenzene	ND	0.0024	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Bromochloromethane	ND	0.0024	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Bromodichloromethane	ND	0.0024	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Bromoform	ND	0.0024	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Bromomethane	ND	0.012	mg/Kg dry	1	V-34	SW-846 8260C	6/4/19	6/4/19 8:12	MFF
2-Butanone (MEK)	ND	0.049	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 8:12	MFF
n-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
sec-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
tert-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	mg/Kg dry	1	•	SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Carbon Disulfide	ND	0.0073	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Carbon Tetrachloride	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Chlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
hlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Chloroethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Chloroform	ND	0.0049	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
2-Chlorotoluene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1-Chlorotolucne	ND	0.0024	ing/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0024	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Dibromomethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,2-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,3-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
,4-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
, I-Dichloroethane	ND	0.0024	mg/Kg dry	t		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
,2-Dichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
,1-Dichloroethylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
ris-1,2-Dichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
rans-1,2-Dichloroethylene	ND	0.0024	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
,2-Dichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
2,2-Dichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
,1-Dichloropropene	ND	0.0024	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
ris-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
rans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Diethyl Ether	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Diisopropyl Ether (DIPE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,4-Dioxane	ND	0.12	mg/Kg dry	i	V-16	SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Ethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

ate Received: 5/31/2019

Field Sample #: GP1-7 (10-12)

Sampled: 5/28/2019 14:55

•		Ve	olatile Organic Com	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
2-Hexanone (MBK)	ND	0.024	mg/Kg dry	t		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Isopropylbenzene (Cumene)	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0049	mg/Kg dry	ī		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Methylene Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Naphthalene	ND	0.0049	mg/Kg dry	1	V-05	SW-846 8260C	6/4/19	6/4/19 8:12	MFF
n-Propylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Styrene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,1,1,2-Tetrachloroethane	ND	0.0024	mg/Kg dry	l		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Tetrachloroethylene	ND	0.0024	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Toluene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,2,3-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,2,4-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
l,l-Trichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,1,2-Trichlorocthanc	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Trichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,2,3-Trichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,2,4-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
1,3,5-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
m+p Xylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
o-Xylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:12	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichlorocthane-d4		108	70-130					6/4/19 8:12	
Toluene-d8		99.3	70-130					6/4/19 8:12	
4-Bromofluorobenzene		105	70-130					6/4/19 8:12	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-7 (10-12)

Sampled: 5/28/2019 14:55

Petroleum Hydrocarbons Analyses - EPH												
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst			
C9-C18 Aliphatics	31	23	mg/Kg dry	1	· · · · · · · · · · · · · · · · · · ·	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
C19-C36 Aliphatics	250	23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Unadjusted C11-C22 Aromatics	190	23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
C11-C22 Aromatics	190	23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Acenaphthene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Acenaphthylene	ND	0.23	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Anthracene	ND	0.23	mg/Kg dry	ı		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Benzo(a)anthracene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Benzo(a)pyrene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Benzo(b)fluoranthene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Benzo(g,h,i)perylene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Benzo(k)fluoranthene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Chrysene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Dibenz(a,h)anthracene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Fluoranthene	2.9	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Fluorene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
deno(1,2,3-cd)pyrene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
2-Methylnaphthalene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Naphthalene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Phenanthrene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Pyrene	ND	0.23	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:48	KLB			
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual		·					
Chlorooctadecane (COD)		63.8	40-140					6/7/19 2:48				
o-Terphenyl (OTP)		71.7	40-140					6/7/19 2:48				
2-Bromonaphthalene		120	40-140					6/7/19 2:48				
2-Fluorobiphenyl		132	40-140					6/7/19 2:48				



voject Location: Beaver St., Waltham, MA

Sample Description:

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Work Order: 19E1819

6/4/19 4:18

Jate Received: 5/31/2019
Field Sample #: GP1-7 (10-12)

Sampled: 5/28/2019 14:55

Sample ID: 19E1819-07
Sample Matrix: Soil

2,5-Dibromotoluene (PID)

•		Pet	roleum Hydrocarbo	ns Analyses	- VPH				
Soil/Methanol Preservation Ratio: 1.24							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	32	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 4:18	KMB
C5-C8 Aliphatics	ND	32	mg/Kg dry	l		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 4:18	KMB
Unadjusted C9-C12 Aliphatics	ND	32	mg/Kg dry	i		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 4:18	KMB
C9-C12 Aliphatics	ND	32	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 4:18	КМВ
C9-C10 Aromatics	ND	32	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 4:18	KMB
Benzene	ND	0.16	mg/Kg dry	I		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 4:18	KMB
Ethylbenzene	ND	0.16	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 4:18	КМВ
Methyl tert-Butyl Ether (MTBE)	ND	0.16	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rcv 2.1	6/3/19	6/4/19 4:18	КМВ
Naphthalene	ND	0.80	mg/Kg dry	1		MADEP-VPII-Fcb 2018 Rev 2.1	6/3/19	6/4/19 4:18	KMB
Toluene	ND	0.16	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 4:18	KMB
m+p Xylene	ND	0.32	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/4/19 4:18	KMB
o-Xylene	ND	0.16	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/4/19 4:18	КМВ
Surrogates		% Recovery	Recovery Limits	;	Flag/Qual				
5-Dibromotoluene (FID)		107	70-130					6/4/19 4:18	

70-130



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

te Received: 5/31/2019

Field Sample #: GP1-7 (10-12) Sample ID: 19E1819-07

Sampled: 5/28/2019 14:55

Sample Matrix: Soil

•				Metals Analy	/ses (Total)		•			
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	•	ND	3.8	mg/Kg dry	t		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Arsenic		6.9	3.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Barium		480	3.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Beryllium		0.90	0.38	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Cadmium		1.9	0.38	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Chromium		730	0.75	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Lead		220	1.1	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Mercury		0.60	0.057	mg/Kg dry	I		SW-846 7471B	6/6/19	6/7/19 10:42	AJL
Nickel		. 60	0.75	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Selenium		ND	7.5	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Silver		0.90	0.75	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Thallium		ND	3.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Vanadium		. 56	1.5	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 23:12	EJB
Zinc		840	3.0	mg/Kg dry	2		SW-846 6010D	6/5/19	6/7/19 14:28	EJB



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP1-7 (10-12)

Sampled: 5/28/2019 14:55

Sample ID: 19E1819-07
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	43,0		% Wı	1		SM 2540G	6/5/19	6/5/19 15:47	JDN



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-8 (10-12)

Sampled: 5/28/2019 15:45

Sample ID: 19E1819-08
Sample Matrix: Soil

Volatile C	rganic)	Compounds	bv	GC/MS
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.12	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 8:37	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Benzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Bromobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Bromochloromethane	ND	0.0023	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Bromodichloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Bromoform	ND	0.0023	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Bromomethane	ND	0.012	mg/Kg dry	1	V-34	SW-846 8260C	6/4/19	6/4/19 8:37	MFF
2-Butanone (MEK)	ND	0.046	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 8:37	MFF
n-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
sec-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
tert-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Carbon Disulfide	ND	0.0070	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Carbon Tetrachloride	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Chlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
alorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Chloroethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Chloroform	ND	0.0046	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
2-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
4-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Dibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
I,2-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,3-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,4-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,1-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,2-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,1-Dichloroethylene	ND	0.0046	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
cis-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
rans-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
2,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,1-Dichloropropene	ND	0.0023	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
eis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
ans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
iethyl Ether	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Diisopropyl Ether (DIPE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,4-Dioxane	ND	0.12	mg/Kg dry	1	V-16	SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Ethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP1-8 (10-12)

Sampled: 5/28/2019 15:45

		Vo	latile Organic Com	pounds by G	C/MS	*			-
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
2-Hexanone (MBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Isopropylbenzene (Cumene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0023	mg/Kg dry	l		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0046	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Methylene Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Naphthalene	ND	0.0046	mg/Kg dry	1	V-05	SW-846 8260C	6/4/19	6/4/19 8:37	MFF
n-Propylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Styrene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,1,1,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Tetrachloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Toluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,2,3-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
',2,4-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,1,1-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,1,2-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Trichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,2,3-Trichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,2,4-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
1,3,5-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
m+p Xylcnc	ND	0.0046	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
o-Xylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 8:37	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		110	70-130					6/4/19 8:37	·····
Toluene-d8		96.9	70-130					6/4/19 8:37	
4-Bromofluorobenzene		101	70-130					6/4/19 8:37	



Project Location: Beaver St., Waltham, MA

Sample Description:

97.7

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-8 (10-12)

Sampled: 5/28/2019 15:45

Sample ID: 19E1819-08 Sample Matrix: Soil

2-Fluorobiphenyl

	•	Pe	troleum Hydrocarbo	ons Analyses	- EPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
C9-C18 Aliphatics	ND	71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
C19-C36 Aliphatics	870	71	mg/Kg dry	5		MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Unadjusted C11-C22 Aromatics	750	71	mg/Kg dry	5		MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
C11-C22 Aromatics	750	71	mg/Kg dry	5		MADEP-EPII-04-1.1	6/3/19	6/7/19 3:07	KLB
Acenaphthene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Accnaphthylene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Anthracene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EP11-04-1.1	6/3/19	6/7/19 3:07	KLB
Benzo(a)anthracene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Benzo(a)pyrene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Benzo(b)fluoranthene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Benzo(g,h,i)perylene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KĻB
Benzo(k)fluoranthene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Chrysene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Dibenz(a,h)anthracene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Fluoranthene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Fluorene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
*ndeno(1,2,3-cd)pyrene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Methylnaphthalene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Naphthalene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Phenanthrene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1,1	6/3/19	6/7/19 3:07	KLB
Pyrene	ND	0.71	mg/Kg dry	5	RL-08	MADEP-EPH-04-1.1	6/3/19	6/7/19 3:07	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)		71.9	40-140	~				6/7/19 3:07	
o-Terphenyl (OTP)		75.0	40-140					6/7/19 3:07	
2-Bromonaphthalene		89.6	40-140					6/7/19 3:07	
2-Fluorobinhenyl		077	40 140					C17115 000	

40-140

6/7/19 3:07



oject Location: Beaver St., Waltham, MA

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-8 (10-12) Sample Description:

Sampled: 5/28/2019 15:45

		Pet	roleum Hydrocarbo	ns Analyses	- VPH				
Soil/Methanol Preservation Ratio: 1.22							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	16	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 12:39	КМВ
C5-C8 Aliphatics	ND	16	mg/Kg dry	l		MADEP-VPH-Fcb 2018 Rcv 2.1	6/3/19	6/3/19 12:39	KMB
Unadjusted C9-C12 Aliphatics	ND	16	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 12:39	KMB
C9-C12 Aliphatics	ND	16	mg/Kg dry	i		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 12:39	KMB
C9-C10 Aromatics	ND	16	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 12:39	KMB
Benzene	ND	0.079	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 12:39	KMB
Ethylbenzene	ND	0.079	mg/Kg dry	I		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 12:39	КМВ
Methyl tert-Butyl Ether (MTBE)	ND	0.079	mg/Kg dry	1		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/3/19 12:39	KMB
Naphthalene	ND	0.40	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 12:39	КМВ
Toluene	ND	0.079	mg/Kg dry	. 1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 12:39	КМВ
m+p Xylene	ND	0.16	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2,1	6/3/19	6/3/19 12:39	KMB
o-Xylene	ND	0.079	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 12:39	КМВ
Surrogates		% Recovery	Recovery Limits	5	Flag/Qual				
∠,5-Dibromotoluene (FID)		101	70-130					6/3/19 12:39	
2,5-Dibromotoluene (PID)		97.3	70-130					6/3/19 12:39	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP1-8 (10-12)

Sampled: 5/28/2019 15:45

	•			Metals Analy	ses (Total)			•		
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	2.3	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Arsenic		13	2.3	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:55	ЕЉ
Barium		90	2.3	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Beryllium		0.38	0.23	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Cadmium		0.90	0.23	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Chromium		81	0.46	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Lead		91	0.69	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Mercury		0.11	0.036	mg/Kg dry	1		SW-846 7471B	6/6/19	6/7/19 10:48	AJL
Nickel		32	0.46	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Selenium		ND	4.6	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Silver		ND	0.46	mg/Kg dry	I		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Thallium		ND	2.3	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Vanadium		68	0.92	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 21:55	EJB
Zinc		390	0.92	mg/Kg dry	ì		SW-846 6010D	6/5/19	6/6/19 21:55	EJB



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-8 (10-12)

Sampled: 5/28/2019 15:45

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	70.3		% Wı	1	***********************************	SM 2540G	6/5/19	6/5/19 15:47	JDN

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Jate Received: 5/31/2019
Field Sample #: GP1-9 (11-13)

Sampled: 5/29/2019 07:00

Sample ID: 19E1819-09

Samole Matrix: Soil	Volatile Organic Compounds by GC/MS											
			<b></b>				Date	Date/Time				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst			
Acetone	ND	0.079	mg/Kg dry	ì	R-05	SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
tert-Amyl Methyl Ether (TAME)	ND	0.00079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Benzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Bromobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Bromochloromethane	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Bromodichloromethane	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Bromoform	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Bromomethane	ND	0.0079	mg/Kg dry	l l	V-34	SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
2-Butanone (MEK)	ND	0.032	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
n-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
sec-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
tert-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
tert-Butyl Ethyl Ether (TBEE)	ND	0.00079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Carbon Disulfide	ND	0.0048	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Carbon Tetrachloride	ND	0.0016	mg/Kg dry	ĭ		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Chlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
"hlorodibromomethane	ND	0.00079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
hloroethane	ND	0.0079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Chloroform	ND	0.0032	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Chloromethane	ND	0.0079	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
2-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
4-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,2-Dibromoethane (EDB)	ND	0.00079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Dibromomethane	ND	0.0016	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,2-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,3-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,4-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
Dichlorodifluoromethane (Freon 12)	ND	0.0079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,1-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,2-Dichloroethane	ND	0.0016	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,1-Dichloroethylene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
cis-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	l		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
trans-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	ţ		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,3-Dichloropropane	ND	0.00079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
2,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
1,1-Dichloropropene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
cis-1,3-Dichloropropene	ND	0.00079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF			
trans-1,3-Dichloropropene	ND	0.00079	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 9:02				
liethyl Ether	ND	0.0079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02				
Diisopropyl Ether (DIPE)	ND	0.00079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02				
1,4-Dioxane	ND	0.079	mg/Kg dry	1	V-16	SW-846 8260C	6/4/19	6/4/19 9:02				
Ethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02 Page 61				



roject Location: Beaver St., Waltham, MA

Sample Description:

105

70-130

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GPI-9 (11-13)

Sampled: 5/29/2019 07:00

Sample ID: 19E1819-09
Sample Matrix: Soil

4-Bromofluorobenzene

•		Vo	olatile Organic Comp	pounds by G	C/MS ·				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analy:
Hexachlorobutadiene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
2-Hexanone (MBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Isopropylbenzene (Cumene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
p-lsopropyltoluene (p-Cymene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0032	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Methylene Chloride	ND	0.0079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Naphthalene	ND	0.0032	mg/Kg dry	1	V-05	SW-846 8260C	6/4/19	6/4/19 9:02	MFF
n-Propylbenzene	ND	0.0016	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Styrene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
1,1,1,2-Tetrachloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
1,1,2,2-Tetrachloroethane	ND	0.00079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Tetrachloroethylene	ND .	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Tetrahydrofuran	ND	0.0079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Toluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
1,2,3-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
,2,4-Trichlorobenzene	ND	0.0016	mg/Kg dry	1 .		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
1,1,1-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
1,1,2-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Trichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
1,2,3-Trichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
1,2,4-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
1,3,5-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Vinyl Chloride	ND	0.0079	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
n+p Xylene	ND	0.0032	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
>-Xylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:02	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		105	70-130					6/4/19 9:02	
Toluene-d8		99.4	70-130					6/4/19 9:02	

6/4/19 9:02



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-9 (11-13)

Sampled: 5/29/2019 07:00

		Pe	troleum Hydrocarb	ons Analyses	- EPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
C19-C36 Aliphatics	ND	11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Unadjusted C11-C22 Aromatics	ND	11	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
C11-C22 Aromatics	ND	11	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Acenaphthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Acenaphthylene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Benzo(a)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Benzo(b)fluoranthene	ND	0.11	mg/Kg dry	I		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Benzo(g,h,i)perylenc	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Benzo(k)fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Chrysene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Dibenz(a,h)anthracene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Fluoranthene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Fluorene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
leno(1,2,3-cd)pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
∠-Methylnaphthalene	ND	0.11	mg/Kg dry	ı		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Naphthalene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Phenanthrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Pyrene	ND	0.11	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:33	KLB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
Chlorooctadecane (COD)		72.7	40-140					6/7/19 1:33	
o-Terphenyl (OTP)		79.7	40-140					6/7/19 1:33	
2-Bromonaphthalene		117	40-140					6/7/19 1:33	
2-Fluorobiphenyl		124	40-140					6/7/19 1:33	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

ate Received: 5/31/2019

Field Sample #: GP1-9 (11-13)

Sampled: 5/29/2019 07:00

Sample Flags: O-01		Pe	troleum Hydrocarbo	ns Analyses	- VPH				
Soil/Methanol Preservation Ratio: 1.43  Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	7.9	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 13:08	КМВ
C5-C8 Aliphatics	ND	7.9	mg/Kg dry	i		MADEP-VPH-Fcb 2018 Rcv 2.1	6/3/19	6/3/19 13:08	КМВ
Unadjusted C9-C12 Aliphatics	ND	7.9	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:08	КМВ
C9-C12 Aliphatics	ND	7.9	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:08	КМВ
C9-C10 Aromatics	ND	7.9	mg/Kg dry	i		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:08	KMB
Benzene	ND	0.039	mg/Kg dry	I		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:08	КМВ
Ethylbenzene	ND	0.039	mg/Kg dry	ı		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:08	KMB
Methyl tert-Butyl Ether (MTBE)	ND	0.039	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 13:08	KMB
Naphthalene	ND	0.20	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:08	КМВ
Toluene	ND	0.039	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 13:08	KMB
m+p Xylene	ND	0.079	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:08	КМВ
o-Xylene	ND	0.039	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:08	КМВ
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
5-Dibromotoluene (FID)		96.4	70-130				2" "	6/3/19 13:08	
.,5-Dibromotoluene (PID)		92.5	70-130					6/3/19 13:08	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-9 (11-13)

Sampled: 5/29/2019 07:00

			Metals Analy	yses (Total)					************
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	I		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Arsenic	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Barium	30	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Beryllium	0.19	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Cadmium	ND	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Chromium	5.8	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Lead	3.5	0.51	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Mercury	ND	0.026	mg/Kg dry	I		SW-846 7471B	6/6/19	6/7/19 10:49	AJL
Nickel	5.5	0.34	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Sclenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Silver	ND	0.34	mg/Kg dry	ı		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Vanadium	.18	0.68	mg/Kg dry	ī		SW-846 6010D	6/5/19	6/6/19 22:00	EJB
Zinc	25	0.68	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:00	EJB



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP1-9 (11-13)

Sampled: 5/29/2019 07:00

Sample ID: 19E1819-09
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	•• •				Date	Date/Time	
<del></del>	Results	KL .	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	95.0		% Wı	1		SM 2540G	6/5/19	6/5/19 15:47	JDN



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP2-1 (6-8) Sample ID: 19E1819-10

Sampled: 5/29/2019 08:30

Ethylbenzene

ND

0.0015

mg/Kg dry

		v	olatile Organic Con	npounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.076	mg/Kg dry	l	R-05	SW-846 8260C	6/4/19	6/4/19 9:26	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Benzene	ND	0.0015	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Bromobenzene	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Bromochloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Bromodichloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Bromoform	ND	0.0015	mg/Kg dry	l		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Bromomethane	ND	0.0076	mg/Kg dry	1	V-34	SW-846 8260C	6/4/19	6/4/19 9:26	MFF
2-Butanone (MEK)	ND	0.030	mg/Kg dry	i	R-05	SW-846 8260C	6/4/19	6/4/19 9:26	MFF
n-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
sec-Butylbenzene	ND	0.0015	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
tert-Butylbenzene	ND	0.0015	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00076	mg/Kg dry	. 1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Carbon Disulfide	ND	0.0045	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Carbon Tetrachloride	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Chlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
hlorodibromomethane	ND	0.00076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Chloroethane	ND	0.0076	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Chloroform	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Chloromethane	ND	0.0076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
2-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
4-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,2-Dibromoethane (EDB)	ND	0.00076	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Dibromomethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,2-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,3-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
I,4-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,1-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,2-Dichloroethane		0.0015	mg/Kg dry			SW-846 8260C	6/4/19	6/4/19 9:26	MFF
I,1-Dichloroethylene	ND			,		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
cis-1,2-Dichloroethylene	ND	0.0030	mg/Kg dry	i .		SW-846 8260C	6/4/19		MFF
•	ND	0.0015	mg/Kg dry	l			6/4/19	6/4/19 9:26	
trans-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	l		SW-846 8260C		6/4/19 9:26	MFF
1,2-Dichloropropanc	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,3-Dichloropropane	ND	0.00076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	
2,2-Dichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	
1,1-Dichloropropene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	
cis-1,3-Dichloropropene	ND	0.00076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	
trans-1,3-Dichloropropene	ND	0.00076	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 9:26	
Piethyl Ether	ND	0.0076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	
Diisopropyl Ether (DIPE)	ND	0.00076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	
1,4-Dioxane	ND	0.076	mg/Kg dry	1	V-16	SW-846 8260C	6/4/19	6/4/19 9:26	MFF
m +				_		CUL 046 0260C	6/4/10	CHUO 0.26	1400

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MFF

6/4/19

SW-846 8260C



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP2-1 (6-8)

Sampled: 5/29/2019 08:30

·		Vo	olatile Organic Com	pounds by G	C/MS	,			
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
2-Hexanone (MBK)	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Isopropylbenzene (Cumene)	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Methylene Chloride	ND	0.0076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Naphthalene	ND	0.0030	mg/Kg dry	1	V-05	SW-846 8260C	6/4/19	6/4/19 9:26	MFF
n-Propylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Styrene	ND	0.0015	mg/Kg dry	ì		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,1,1,2-Tetrachloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,1,2,2-Tetrachloroethane	ND	0.00076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Tetrachloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Tetrahydrofuran	ND	0.0076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Toluene	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,2,3-Trichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
2,4-Trichlorobenzene	ND	0,0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,1,1-Trichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,1,2-Trichlorocthane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Trichloroethylene	ND	0.0015	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,2,3-Trichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,2,4-Trimethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
1,3,5-Trimethylbenzene	ND	0.0015	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Vinyl Chloride	ND	0.0076	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
m+p Xylene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
o-Xylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:26	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		107	70-130					6/4/19 9:26	
Toluene-d8		100	70-130					6/4/19 9:26	
4-Bromofluorobenzene		105	70-130					6/4/19 9:26	



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP2-1 (6-8)

Sampled: 5/29/2019 08:30

•		Pet	roleum Hydrocarbo	ns Analyses	- EPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
C19-C36 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Accnaphthylene	. ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Benzo(a)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Benzo(a)pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPII-04-1.1	6/3/19	6/7/19 1:52	KLB
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Chrysene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Fluorene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
deno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
2-Methylnaphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Naphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Phenanthrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 1:52	KLB
Surrogates		% Recovery	Recovery Limits	;	Flag/Qual				
Chlorooctadecane (COD)		74.8	40-140	<del>,</del>				6/7/19 1:52	****
o-Terphenyl (OTP)		87.9	40-140					6/7/19 1:52	
2-Bromonaphthalene		118	40-140					6/7/19 1:52	
2-Fluorobiphenyl		125	40-140					6/7/19 1:52	



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP2-1 (6-8)

Sampled: 5/29/2019 08:30

Sample Flags: O-01		I	Petroleum Hydrocarbo	ons Analyses	- VPH				
Soil/Methanol Preservation Ratio: 1.27  Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	8.6	mg/Kg dry	1	1100 4000	MADEP-VPH-Feb 2018	6/3/19	6/3/19 13:38	KMB
•		0.0	mg/kg dry	•		Rev 2.1	0/3/17	0/3/19 13:38	KMB
C5-C8 Aliphatics	ND	8.6	mg/Kg dry	ı		MADEP-VPH-Fcb 2018	6/3/19	6/3/19 13:38	KMB
Unadjusted C9-C12 Aliphatics	ND	8.6	mg/Kg dry	i		Rcv 2.1 MADEP-VPH-Feb 2018 Rcv 2.1	6/3/19	6/3/19 13:38	КМВ
C9-C12 Aliphatics	ND	8.6	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:38	КМВ
C9-C10 Aromatics	ND	8.6	ing/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:38	KMB
Benzene	ND	0.043	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:38	KMB
Ethylbenzene	ND	0.043	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 13:38	KMB
Methyl tert-Butyl Ether (MTBE)	ND	0.043	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 13:38	KMB
Naphthalene	ND	0.21	mg/Kg dry	1		MADEP-VPII-Fcb 2018 Rev 2.1	6/3/19	6/3/19 13:38	КМВ
Toluene	ND	0.043	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 13:38	КМВ
m+p Xylene	ND	0.086	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 13:38	КМВ
o-Xylene	ND	0.043	mg/Kg dry	i		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 13:38	КМВ
Surrogates		% Recovery	Recovery Limits	1	Flag/Qual				
.,5-Dibromotoluene (FID)		104	70-130					6/3/19 13:38	
2,5-Dibromotoluene (PID)		99.4	70-130					6/3/19 13:38	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

ate Received: 5/31/2019
Field Sample #: GP2-1 (6-8)

Sampled: 5/29/2019 08:30

			Metals Analy	ses (Total)	•				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Arsenic	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Barium	23	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Beryllium	0.29	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Cadmium	ND	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Chromium	38	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Lead	7.6	0.51	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Mercury	ND	0.026	mg/Kg dry	1		SW-846 7471B	6/6/19	6/7/19 10:51	AJL
Nickel	17	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Sclenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Vanadium	41	0.68	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB
Zinc	39	0.68	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:05	EJB



oject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP2-1 (6-8)

Sampled: 5/29/2019 08:30

Sample ID: 19E1819-10
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		96.3		% Wı	1		SM 2540G	6/5/19	6/5/19 15:47	JDN



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP2-2 (7-9) Sample ID: 19E1819-11

Sampled: 5/29/2019 09:45

Sample Matrix: Soil

		1	Volatile Organic Cor	npounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.075	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 9:51	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Benzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Bromobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Bromochloromethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Bromodichloromethane	ND	0.0015	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Bromoform	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Bromomethane	ND	0.0075	mg/Kg đry	1	V-34	SW-846 8260C	6/4/19	6/4/19 9:51	MFF
2-Butanone (MEK)	ND	0.030	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 9:51	MFF
n-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
sec-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
tert-Butylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00075	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Carbon Disulfide	ND	0.0045	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Carbon Tetrachloride	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Chlorobenzene	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
hlorodibromomethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Chloroethane	ND	0.0075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Chloroform	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Chloromethane	ND	0.0075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
2-Chlorotoluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
4-Chlorotolucne	ND	0.0015	mg/Kg dry	. 1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,2-Dibromoethane (EDB)	ND	0.00075	mg/Kg dry	t		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Dibromomethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,2-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 3260C	6/4/19	6/4/19 9:51	MFF
1,3-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,4-Dichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,1-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,2-Dichloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,1-Dichloroethylene	ND	0.0030	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
cis-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
trans-1,2-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,2-Dichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,3-Dichloropropane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
2,2-Dichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,1-Dichloropropene	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
cis-1,3-Dichloropropene	ND	0.00075	mg/Kg dry	t		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
trans-1,3-Dichloropropene	ND	0.00075	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
ethyl Ether	ND	0.0075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Diisopropyl Ether (DIPE)	ND	0.00075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,4-Dioxane	ND	0.075	mg/Kg dry	ı	V-16	SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Ethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

ate Received: 5/31/2019 Field Sample #: GP2-2 (7-9)

Sampled: 5/29/2019 09:45

		Vo	latile Organic Com	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
2-Hexanone (MBK)	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Isopropylbenzene (Cumene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0030	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Methylene Chloride	ND	0.0075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Naphthalene	ND	0.0030	mg/Kg dry	1	V-05	SW-846 8260C	6/4/19	6/4/19 9:51	MFF
n-Propylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Styrene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,1,1,2-Tetrachloroethane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,1,2,2-Tetrachloroethane	ND	0.00075	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Tetrachloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Tetrahydrofuran	ND	0.0075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Toluene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,2,3-Trichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,2,4-Trichlorobenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,1-Trichloroethane	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,1,2-Trichlorocthane	ND	0.0015	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Trichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,2,3-Trichloropropane	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1.2,4-Trimethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
1,3,5-Trimethylbenzene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Vinyl Chloride	ND	0.0075	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
m+p Xylene	ND	0.0030	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 9:51	MFF
o-Xylene	ND	0.0015	mg/Kg dry	1	,	SW-846 8260C	6/4/19	6/4/19 9:51	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		103	70-130					6/4/19 9:51	
Toluene-d8		98.1	70-130					6/4/19 9:51	
4-Bromofluorobenzene		104	70-130					6/4/19 9:51	



Project Location: Beaver St., Waltham, MA

Sample Description:

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Work Order: 19E1819

)ate Received: 5/31/2019 Field Sample #: GP2-2 (7-9)

Sampled: 5/29/2019 09:45

Sample ID: 19E1819-I1
Sample Matrix: Soil

2-Fluorobiphenyl

•		Per	troleum Hydrocarbo	ons Analyses	- EPH	•			
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analys
C9-C18 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
C19-C36 Aliphatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
C11-C22 Aromatics	ND	10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Acenaphthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Acenaphthylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Benzo(a)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Benzo(a)pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Benzo(b)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Benzo(g,h,i)perylene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Benzo(k)fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Chrysene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Dibenz(a,h)anthracene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Fluoranthene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Fluorene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Indeno(1,2,3-cd)pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Methylnaphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Naphthalene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Phenanthrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Pyrene	ND	0.10	mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:11	KLB
Surrogates		% Recovery	Recovery Limits	· · · · · · · · · · · · · · · · · · ·	Flag/Qual				
Chlorooctadecane (COD)		79.1	40-140					6/7/19 2:11	
o-Terphenyl (OTP)		88.0	40-140					6/7/19 2:11	
2-Bromonaphthalene		118	40-140					6/7/19 2:11	
N. 191 1 . 2 . 3 1									

40-140

6/7/19 2:11



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP2-2 (7-9)

Sampled: 5/29/2019 09:45

		. Pe	troleum Hydrocarbo	ons Analyses	- VPH				
Soil/Methanol Preservation Ratio: 1.20  Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	9.1	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
C5-C8 Aliphatics	ND	9.1	mg/Kg dry	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
Unadjusted C9-C12 Aliphatics	ND	9.1	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
C9-C12 Aliphatics	ND	9.1	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
C9-C10 Aromatics	ND	9.1	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
Benzene	ND	0.045	mg/Kg dry	ł		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
Ethylbenzene	ND	0.045	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
Methyl tert-Butyl Ether (MTBE)	ND	0.045	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
Naphthalene	ND	0.23	mg/Kg dry	1		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
Toluene	ND	0.045	mg/Kg dry	ì		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
m+p Xylene	ND	0.091	mg/Kg dry	ì		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
o-Xylene	ND	0.045	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:07	КМВ
Surrogates	1000	% Recovery	Recovery Limits	3	Flag/Qual				
,5-Dibromotoluene (FID)		101	70-130					6/3/19 14:07	
2,5-Dibromotoluene (PID)		98.2	70-130					6/3/19 14:07	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

ate Received: 5/31/2019
Field Sample #: GP2-2 (7-9)

Sampled: 5/29/2019 09:45

	•		Metals Analy	ses (Total)					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg∕Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Arsenic	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Barium	19	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Beryllium	0.19	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Cadmium	ND	0.17	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Chromium	6.0	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Lead	4.0	0.51	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	6/6/19	6/7/19 10:52	AJL
Nickel	5.4	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Sclenium	ND	3.4	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Vanadium	17	0.68	mg/Kg dry	1	*	SW-846 6010D	6/5/19	6/6/19 22:10	EJB
Zinc	24	0.68	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:10	EJB



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

ate Received: 5/31/2019 rield Sample #: GP2-2 (7-9)

Sampled: 5/29/2019 09:45

Sample ID: 19E1819-11
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

						Date	Date/Time	
Analyte	Results RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	96.0	% Wı	1		SM 2540G	6/5/19	6/5/19 15:47	JDN

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

te Received: 5/31/2019 rield Sample #: GP2-3 (7-9)

Sampled: 5/28/2019 10:50

		v	olatile Organic Con	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acelone	ND	0.072	mg/Kg dry	1	R-05	SW-846 8260C	6/4/19	6/4/19 10:15	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Benzene	ND	0.0014	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Bromobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Bromochloromethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Bromodichloromethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Bromoform	ND	0.0014	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Bromomethane	ND	0.0072	mg/Kg dry	ı	V-34	SW-846 8260C	6/4/19	6/4/19 10:15	MFF
2-Butanone (MEK)	ND	0.029	mg/Kg dry	ı	R-05	SW-846 8260C	6/4/19	6/4/19 10:15	MFF
n-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
sec-Butylbenzene	ND	0.0014	mg/Kg dry	3		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
tert-Butylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Carbon Disulfide	ND	0.0043	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Carbon Tetrachloride	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Chlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Chlorodibromomethane	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
loroethane	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
unloroform	ND	0.0029	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Chloromethane	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
2-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1-Chlorotoluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
,2-Dibromo-3-chloropropane (DBCP)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,2-Dibromoethane (EDB)	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Dibromomethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,2-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,3-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,4-Dichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,1-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
,2-Dichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
,1-Dichloroethylene	ND	0.0029	mg/Kg dry	I		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
ris-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
rans-1,2-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
,2-Dichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
,3-Dichloropropane	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
,2-Dichloropropane	ND	0.0014	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
,1-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
is-1,3-Dichloropropene	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
rans-1,3-Dichloropropene	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Piethyl Ether	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
sopropyl Ether (DIPE)	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
,4-Dioxane	ND	0.072	mg/Kg dry	1	V-16	SW-846 8260C	6/4/19	6/4/19 10:15	MFF
thylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF



roject Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP2-3 (7-9)

Sampled: 5/28/2019 10:50

		Vo	olatile Organic Com	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
2-Hexanone (MBK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Isopropylbenzene (Cumene)	ND	0.0014	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0029	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Methylene Chloride	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Naphthalene	ND	0.0029	mg/Kg dry	1	V-05	SW-846 8260C	6/4/19	6/4/19 10:15	MFF
n-Propylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Styrene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,1,1,2-Tetrachloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,1,2,2-Tetrachloroethane	ND	0.00072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Tetrachloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Tetrahydrofuran	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Toluene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,2,3-Trichlorobenzene	ND	0.0014	mg/Kg dry	ı		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
2,4-Trichlorobenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,1,1-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,1,2-Trichloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Trichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,2,3-Trichloropropanc	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,2,4-Trimethylbenzene	ND	0.0014	mg/Kg dry	i		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
1,3,5-Trimethylbenzene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Vinyl Chloride	ND	0.0072	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
m+p Xylene	ND	0.0029	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
o-Xylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	6/4/19	6/4/19 10:15	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual			***************************************	
1,2-Dichloroethane-d4		112	70-130				<del></del>	6/4/19 10:15	
Toluene-d8		99.1	70-130					6/4/19 10:15	
4-Bromofluorobenzene		106	70-130					6/4/19 10:15	



Petroleum Hydrocarbons Analyses - EPH

Project Location: Beaver St., Waltham, MA

Analyte

Sample Description:

RL

11

11

11

11

Results

ND

ND

17

13

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP2-3 (7-9) Sample ID: 19E1819-12

Sampled: 5/28/2019 10:50

Sample Matrix: Soil

C9-C18 Aliphatics

C19-C36 Aliphatics

C11-C22 Aromatics

Unadjusted C11-C22 Aromatics

Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
mg/Kg dry	i		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
mg/Kg dry	l		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
mg/Kg dry	1		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
ma/Ka day	1		MADED EDIT OF L	<b>4 1 1 1 1</b>		

Surrogates		0/ 10						
Pyrene	0.56	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Phenanthrene	0.26	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Naphthalene	ND	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
2-Methylnaphthalene	ND	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Indeno(1,2,3-cd)pyrene	0.34	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
	ND	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Fluorene	0.78	0.11	mg/Kg dry	ı	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Dibenz(a,h)anthracene Fluoranthene	ND	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Chrysene .	0.37	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
• •	0.23	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Benzo(k)fluoranthene	0.33	11.0	mg/Kg dry	l	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Benzo(g,h,i)perylene	0.64	0.11	mg/Kg dry	I	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Benzo(b)fluoranthene	0.63	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Benzo(a)pyrene	0.29	0.11	mg/Kg dry	1	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Benzo(a)anthracene	ND	0.11	mg/Kg dry	l	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Anthracene	ND	0.11	mg/Kg dry	i	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Acenaphthylene			mg/Kg dry	I	MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB
Acenaphthene	ND	0.11	mg/kg dry		MADEP-EPH-04-1.1	6/3/19	6/7/19 2:30	KLB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Chlorooctadecane (COD)	73.4	40-140		6740 220
o-Terphenyl (OTP)	83.5	40-140		6/7/19 2:30
2-Bromonaphthalene	118	40-140		6/7/19 2:30
2-Fluorobiphenyl	129	40-140		6/7/19 2:30
• •	.27	40-140		6/7/19 2:30



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019

Field Sample #: GP2-3 (7-9)

Sampled: 5/28/2019 10:50

Sample Flags: O-01		Po	troleum Hydrocarbo	ons Analyses	- VPH				
Soil/Methanol Preservation Ratio: 1.42  Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	8.6	mg/Kg dry	l		MADEP-VPH-Fcb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
C5-C8 Aliphatics	ND	8.6	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
Unadjusted C9-C12 Aliphatics	ND	8.6	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
C9-C12 Aliphatics	ND	8.6	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
C9-C10 Aromatics	ND	8.6	mg/Kg dry	i		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
Benzene	ND	0.043	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
Ethylbenzene	ND	0.043	mg/Kg dry	I		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	KMB
Methyl tert-Butyl Ether (MTBE)	ND	0.043	mg/Kg dry	i		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
Naphthalene	ND	0.21	mg/Kg dry	1		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
Toluene	ND	0.043	mg/Kg dry	1		MADEP-VPII-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
m+p Xylene	ND	0.086	mg/Kg dry	l		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
o-Xylene	ND	0.043	mg/Kg dry	1		MADEP-VPH-Feb 2018 Rev 2.1	6/3/19	6/3/19 14:36	КМВ
Surrogates		% Recovery	Recovery Limits		Flag/Qual			· · · · · · · · · · · · · · · · · · ·	**********
2,5-Dibromotoluene (FID)		101	70-130			*****		6/3/19 14:36	
2,5-Dibromotoluene (PID)		96.6	70-130					6/3/19 14:36	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP2-3 (7-9) Sample ID: 19E1819-12

Sampled: 5/28/2019 10:50

Sample Matrix: Soil

*				Metals Analy	yses (Total)					
A	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	1.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Arsenic		4.4	1.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Barium		48	1.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Beryllium		0.31	0.18	mg/Kg dry	I		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Cadmium		0.38	0.18	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Chromium		11	0.36	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	ĒJΒ
Lead		110	0.54	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Mercury		0.080	0.026	mg/Kg dry	1		SW-846 7471B	6/6/19	6/7/19 10:54	AJL
Nickel		10	0.36	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Sclenium		ND	3.6	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Silver		ND	0.36	mg/Kg dry	i		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Thallium		ND	1.8	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	EJB
Vanadium		33	0.72	mg/Kg dry	1		SW-846 6010D	6/5/19	6/6/19 22:15	
Zinc		70	0.72	mg/Kg dry	1		SW-846 6010D	6/5/19		EJB
					-		5 11-040 00 TOD	0/3/19	6/6/19 22:15	EJB

Work Order: 19E1819



Project Location: Beaver St., Waltham, MA

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Sample Description:

Date Received: 5/31/2019 Field Sample #: GP2-3 (7-9)

Sampled: 5/28/2019 10:50

Sample ID: 19E1819-12 Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time	
% Solids						xeinou	rrepareu	Analyzed	Analyst
	91.8		% Wt	i		SM 2540G	6/5/19	6/5/19 15:48	IDN



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-2 (0-2)

Sampled: 5/28/2019 10:00

Sample ID: 19E1819-13
Sample Matrix: Soil

Sample	e Fla	gs:	DL-03

Organochloride	Pesticides	by	GC/ECD
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	0.031	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
alpha-BHC [1]	ND	0.031	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
beta-BHC [1]	ND	0.031	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
delta-BHC [1]	ND	0.031	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
gamma-BHC (Lindane) [1]	ND	0.012	nig/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Chlordanc [1]	ND	0.12	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	
4,4'-DDD [1]	ND	0.025	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
4,4'-DDE [1]	0.57	0.025	mg/Kg dry	5		SW-846 8081B	6/3/19		TG
4,4'-DDT [1]	0.48	0.025	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Dicldrin [1]	ND	0.025	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Endosulfan I [1]	ND	0.031	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Endosulfan II [1]	ND	0.050	mg/Kg dry	5		SW-846 8081B		6/6/19 22:30	TG
Endosulfan sulfate [1]	· ND	0.050	mg/Kg dry	5			6/3/19	6/6/19 22:30	TG
Endrin [1]	ND	0.050	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Endrin ketone [1]	ND	0.050				SW-846 8081B	6/3/19	6/6/19 22:30	TG
Heptachlor [1]	ND	0.030	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Heptachlor epoxide [1]	ND	0.031	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Hexachlorobenzene [1]	ND		mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Methoxychlor [1]		0.037	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
	ND	0.31	mg/Kg dry	5		SW-846 8081B	6/3/19	6/6/19 22:30	TG
Surrogates		% Recovery	Recovery Limits	1	Flag/Qual				
Decachlorobiphenyl [1]		78.1	30-150					6/6/19 22:30	
Decachlorobiphenyl [2]		73.6	30-150					6/6/19 22:30	
Tetrachloro-m-xylene [1]		65.9	30-150					6/6/19 22:30	
Tetrachloro-m-xylene [2]		61.4	30-150					6/6/19 22:30	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-2 (0-2)

Sampled: 5/28/2019 10:00

Sample ID: 19E1819-13
Sample Matrix: Soil

	•		Herbicides by	GC/ECD				•	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	160	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
2,4-DB [1]	ND	160	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
2,4,5-TP (Silvex) [1]	ND	16	µg∕kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
2,4,5-T [1]	ND	16	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
Dalaipon [i]	ND	390	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
Dicamba [1]	ND	16	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
Dichloroprop [1]	ND	160	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
Dinoseb [1]	ND	78	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
MCPA[1]	ND	16000	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
MCPP[1]	ND	16000	μg/kg dry	5	DL-03	SW-846 8151A	6/4/19	6/10/19 6:15	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		74.3	30-150		DL-03			6/10/19 6:15	
2,4-Dichlorophenylacetic acid [2]		82.4	30-150		DL-03			6/10/19 6:15	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-2 (0-2)

Sampled: 5/28/2019 10:00

Sample ID: 19E1819-13

Sample Matrix: Soil Sample Flags: O-32

Polychlorinated Bi	phenyls with 3540	Soxhlet Extraction
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	AYH
Aroclor-1221 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	АҮН
Aroclor-1232 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	AYH
Aroclor-1242 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	АУН
Aroclor-1248 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	AYH
Aroclor-1254 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	AYH
Aroclor-1260 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	AYH
Aroclor-1262 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	AYH
Aroclor-1268 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 21:47	АҮН
Surrogates		% Recovery	Recovery Limits		Flag/Qual		·····		
Decachlorobiphenyl [1]		89.1	30-150			*****		6/5/19 21:47	
Decachlorobiphenyl [2]		97.4	30-150						
Tetrachloro-m-xylene [1]		94.0	30-150					6/5/19 21:47	
Tetrachloro-m-xylene [2]		94.6	30-150					6/5/19 21:47 6/5/19 21:47	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-2 (0-2)

Sampled: 5/28/2019 10:00

Sample ID: 19E1819-13

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Amalicat
% Solids	79.7		% Wı	1		SM 2540G	6/5/19	6/5/19 15:48	Analyst



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-6 (3-5)

Sampled: 5/28/2019 13:50

Sample ID: 19E1819-14
Sample Matrix: Soil

•		0	rganochloride Pesti	icides by GC/	ECD	•			
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Aldrin [1]	ND	0.0059	mg/Kg dry	ı		SW-846 8081B	6/3/19	6/6/19 22:57	TG
alpha-BHC [1]	ND	0.0059	mg/Kg dry	ı		SW-846 8081B	6/3/19	6/6/19 22:57	TG
beta-BHC [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
delta-BHC [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
gamma-BHC (Lindane) [1]	ND	0.0023	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Chlordane [1]	ND	0.023	mg/Kg dry	i		SW-846 8081B	6/3/19	6/6/19 22:57	TG
4,4'-DDD [1]	ND	0.0047	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
4,4'-DDE [1]	0.027	0.0047	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
4,4'-DDT [2]	0.020	0.0047	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Dieldrin [1]	ND	0.0047	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Endosulfan I [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Endosulfan II [1]	ND	0.0094	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Endosulfan sulfate [1]	ND	0.0094	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Endrin [1]	ND	0.0094	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Endrin ketone [1]	ND	0.0094	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Heptachlor [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Heptachlor epoxide [1]	ND	0.0059	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Aexachlorobenzene [1]	ND	0,0070	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Methoxychlor [1]	ND	0.059	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 22:57	TG
Surrogates		% Recovery	Recovery Limits	;	Flag/Qual				
Decachlorobiphenyl [1]		84.1	30-150					6/6/19 22:57	
Decachlorobiphenyl [2]		85.7	30-150					6/6/19 22:57	
Tetrachloro-m-xylene [1]		83.5	30-150					6/6/19 22:57	
Tetrachloro-m-xylene [2]		77.1	30-150					6/6/19 22:57	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-6 (3-5)

Sampled: 5/28/2019 13:50

Sample ID: 19E1819-14
Sample Matrix: Soil

		•	Herbicides by	GC/ECD					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	29	μg/kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
2,4-DB [1]	ND	29	μg/kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
2,4,5-TP (Silvex) [1]	ND	2.9	μg∕kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
2,4,5-T [1]	ND	2.9	μg/kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
Dalalpon [1]	ND	73	μg/kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
Dicamba [1]	ND	2.9	μg/kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
Dichloroprop [1]	ND	29	μg/kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
Dinoseb [1]	ND	15	μg/kg dry	t		SW-846 8151A	6/4/19	6/10/19 6:54	TG
MCPA [1]	ND	2900	μg/kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
MCPP[1]	ND	2900	μg∕kg dry	1		SW-846 8151A	6/4/19	6/10/19 6:54	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		79.9	30-150					6/10/19 6:54	
2,4-Dichlorophenylacetic acid [2]		84.0	30-150					6/10/19 6:54	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-6 (3-5)

Sampled: 5/28/2019 13:50

Sample ID: 19E1819-14
Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated	Biphenyls with	a 3540	Soxhlet	Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	AYH
Aroclor-1221 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	АҮН
Aroclor-1232 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	АҮН
Aroclor-1242 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	AYH
Aroclor-1248 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	AYH
Aroclor-1254 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	AYH
Aroclor-1260 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	АҮН
Aroclor-1262 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	
Aroclor-1268 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:00	AYH AYH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		82.2	30-150					6/5/19 22:00	
Decachlorobiphenyl [2]		92.1	30-150						
Tetrachloro-m-xylene [1]		82.4	30-150					6/5/19 22:00	
Tetrachloro-m-xylene [2]		83.4	30-150					6/5/19 22:00 6/5/19 22:00	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-6 (3-5)

Sampled: 5/28/2019 13:50

Sample ID: 19E1819-14
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids		85.4		% Wı	1		SM 2540G	6/5/19	6/5/19 15:48	JDN



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-7 (3-5)
Sample ID: 19E1819-15

Sampled: 5/28/2019 14:55

Sample ID:	19	ΕI	81
Sample Matr	iv.	e,	<b>.:1</b>

			Organochloride Pesti	icides by GC	ÆCD				
Analyte	Results	RL	Units	Dilution	Fiag/Qual	Method	Date Prepared	Date/Time Analyzed	Amalous
Aldrin [1]	ND	0.0070	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	Analyst
alpha-BHC [1]	ND	0.0070	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	TG
beta-BHC [1]	ND	0.0070	mg/Kg dry	1		SW-846 8081B	6/3/19		TG
delta-BHC [1]	ND	0.0070	mg/Kg dry	1		SW-846 8081B		6/6/19 23:23	TG
gamma-BHC (Lindane) [1]	ND	0.0028	mg/Kg dry	1			6/3/19	6/6/19 23:23	TG
Chlordane [1]	0.11	0.028	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	TG
4,4'-DDD [2]	0,44	0.22				SW-846 8081B	6/3/19	6/6/19 23:23	TG
4,4'-DDE [1]	5.2	0.22	mg/Kg dry	40		SW-846 8081B	6/3/19	6/7/19 8:33	TG
4,4'-DDT [1]	12	0.22	mg/Kg dry	40		SW-846 8081B	6/3/19	6/7/19 8:33	TG
Dieldrin [1]	0.092		mg/Kg dry	80		SW-846 8081B	6/3/19	6/7/19 11:14	TG
Endosulfan I [1]		0.0056	mg/Kg dry	I		SW-846 8081B	6/3/19	6/6/19 23:23	TG
Endosulfan II [1]	ND	0.0070	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	TG
Endosulfan sulfate [1]	ND	0.011	mg/Kg dry	ī		SW-846 8081B	6/3/19	6/6/19 23:23	TG
• •	ND	0.011	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	TG
Endrin [1]	0.035	0.011	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	TG
Endrin ketone [1]	0.013	0.011	mg/Kg dry	1	P-02	SW-846 8081B	6/3/19	6/6/19 23:23	TG
Heptachlor [1]	ND	0.0070	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	TG
Heptachlor epoxide [2]	0.0083	0.0070	mg/Kg dry	1	P-02	SW-846 8081B	6/3/19	6/6/19 23:23	TG
Hexachlorobenzene [1]	ND	0.0083	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	TG
Methoxychlor [1]	ND	0.070	mg/Kg dry	1		SW-846 8081B	6/3/19	6/6/19 23:23	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual	· · · · · · · · · · · · · · · · · · ·			
Decachlorobiphenyl [1]		73.1	30-150			- Allen - Alle		6/6/19 23:23	
Decachlorobiphenyl [2]		80.5	30-150					6/6/19 23:23	
Tetrachloro-m-xylene [1]		66.3	30-150					6/6/19 23:23	
Tetrachloro-m-xylene [2]		59.7	30-150					6/6/19 23:23	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19E1819

6/10/19 7:32

Date Received: 5/31/2019 Field Sample #: GP1-7 (3-5)

Sampled: 5/28/2019 14:55

Sample ID: 19E1819-15 Sample Matrix: Soil

Sample Flags: DL-03			Herbicides by	GC/ECD					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	170	μg/kg dry	5		SW-846 8151A	6/4/19	6/10/19 7:32	TG
2,4-DB [1]	ND	170	μg/kg dry	5		SW-846 8151A	6/4/19	6/10/19 7:32	TG
2,4,5-TP (Silvex) [1]	ND	17	μg/kg dry	5		SW-846 8151A	6/4/19	6/10/19 7:32	TG
2,4,5-T [1]	ND	17	μg/kg dry	5		SW-846 8151A	6/4/19	6/10/19 7:32	TG
Dalaipon [1]	ND	430	μg/kg dry	5		SW-846 8151A	6/4/19	6/10/19 7:32	
Dicamba [1]	ND	17	μg/kg dry	5		SW-846 8151A	6/4/19	6/10/19 7:32	TG
Dichloroprop [1]	ND	170	μg/kg dry	5		SW-846 8151A	6/4/19	6/10/19 7:32	TG
Dinoseb [1]	ND	86	μg/kg dry	5		SW-846 8151A	6/4/19		TG
MCPA [1]	ND	17000	μg/kg dry	5		SW-846 8151A	•	6/10/19 7:32	TG
MCPP [1]	ND	17000	μg/kg dry	5		SW-846 8151A	6/4/19 6/4/19	6/10/19 7:32	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual	3W-040 8131A	0/4/19	6/10/19 7:32	TG
2,4-Dichlorophenylacetic acid [1]		70.3	30-150		r.mg. Anni			(110/10 7.00	
2,4-Dichlorophenylacetic acid [2]		81.3	30-150					6/10/19 7:32 6/10/19 7:32	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Analyte

Sample Description:

Results

ND

ND

ND

ND

ND

ND

ND

ND

ND

Work Order: 19E1819

Date Received: 5/31/2019 Field Sample #: GP1-7 (3-5)

Sampled: 5/28/2019 14:55

Sample ID: 19E1819-15 Sample Matrix: Soil

Sample Flags: O-32
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Aroclor-1016 [1]

Aroclor-1221 [1]

Aroclor-1232 [1]

Aroclor-1242 [1]

Aroclor-1248 [1]

Aroclor-1254 [1]

Aroclor-1260 [1]

Aroclor-1262 [1]

Aroclor-1268 [1]

Polychlo	rinated Biphenyls w	ith 3540 Soxh	let Extraction				
RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	AYH
0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	AYH
0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	АУН
0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	АҮН
0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	AYH
0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	АУН
0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	AYH
0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	AYH

Aroclor-1268 [1]	ND	0.11	mg/Kg dry	4		SW-846 8082A	6/3/19	6/5/19 22:13	AYH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		81.9	30-150					((5/10, 00.10	
Decachlorobiphenyl [2]		95.1	30-150					6/5/19 22:13	
Tetrachloro-m-xylene [1]		93.2	30-150					6/5/19 22:13	
Tetrachloro-m-xylene [2]		94.3						6/5/19 22:13	
		34.3	30-150					6/5/19 22:13	



Project Location: Beaver St., Waltham, MA

Sample Description:

Description:

Work Order: 19E1819

Date Received: 5/31/2019
Field Sample #: GP1-7 (3-5)

Sampled: 5/28/2019 14:55

Sample ID: 19E1819-15
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	71.9	% Wı	1		SM 2540G	6/5/19	6/5/19 15:48	IDN



### Sample Extraction Data

## Prep Method: SW-846 3546-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19E1819-01 [GP1-1 (11-13)]	B232351	20.0			
19E1819-02 [GP1-2 (11-13)]	B232351		2.00	06/03/19	
19E1819-03 [GP1-3 (11-13)]		20.2	2.00	06/03/19	
19E1819-04 [GP1-4 (11-13)]	B232351	20.0	2.00	06/03/19	
19E1819-05 [GP1-5 (11-13)]	B232351	20.0	2.00	06/03/19	
• • •	B232351	20.0	2.00	06/03/19	
19E1819-06 [GP1-6 (11-13)]	B232351	20.2	2.00	06/03/19	
19E1819-07 [GP1-7 (10-12)]	B232351	20.2	2.00	06/03/19	
19E1819-08 [GP1-8 (10-12)]	B232351	20.1	2.00	06/03/19	
19E1819-09 [GP1-9 (11-13)]	B232351	20.0	2.00		
19E1819-10 [GP2-1 (6-8)]	B232351	20.0	2.00	06/03/19	
19E1819-11 [GP2-2 (7-9)]	B232351	20.3		06/03/19	
19E1819-12 [GP2-3 (7-9)]	B232351		2.00	06/03/19	
	D232331	20.3	2.00	06/03/19	

## Prep Method: MA VPH-MADEP-VPH-Feb 2018 Rev 2.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19E1819-08 [GP1-8 (10-12)] 19E1819-09 [GP1-9 (11-13)] 19E1819-10 [GP2-1 (6-8)] 19E1819-11 [GP2-2 (7-9)]	B232287 B232287 B232287 B232287	6.10 21.5 6.30 18.0	6.80 16.1 5.20 15.7	06/03/19 06/03/19 06/03/19 06/03/19
19E1819-12 [GP2-3 (7-9)]	B232287	7.10	5.60	06/03/19

### Prep Method: MA VPH-MADEP-VPH-Feb 2018 Rev 2.1

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19E1819-01 [GP1-1 (11-13)]	B232289	20,9	17.0		
19E1819-02 [GP1-2 (11-13)]	B232289		15.8	06/03/19	
19E1819-03 [GP1-3 (11-13)]		19.5	16.5	06/03/19	
- · · · ·	B232289	7.40	5.30	06/03/19	
19E1819-04 [GP1-4 (11-13)]	B232289	20.9	15.6	06/03/19	
19E1819-05 [GP1-5 (11-13)]	B232289				
19E1819-06 [GP1-6 (11-13)]		21.2	16.1	06/03/19	
* **	B232289	7.50	5.40	06/03/19	
19E1819-07 [GP1-7 (10-12)]	B232289	18.6	25.6	06/03/19	

### Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
19E1819-01 [GPI-1 (11-13)]	B232510	
19E1819-02 [GP1-2 (11-13)]	B232510	06/05/19
19E1819-03 [GP1-3 (11-13)]	B232510	06/05/19
19E1819-04 [GP1-4 (11-13)]	B232510	06/05/19
19E1819-05 [GP1-5 (11-13)]		06/05/19
19E1819-06 [GP1-6 (11-13)]	B232510	06/05/19
19E1819-07 [GP1-7 (10-12)]	B232510	06/05/19
19E1819-08 [GP1-8 (10-12)]	B232510	06/05/19
, , ,,	B232510	06/05/19
19E1819-09 [GP1-9 (11-13)]	B232510	06/05/19
19E1819-10 [GP2-1 (6-8)]	B232510	06/05/19
19E1819-11 [GP2-2 (7-9)]	B232510	06/05/19
819-12 [GP2-3 (7-9)]	B232510	06/05/19
ು:1819-13 [GP1-2 (0-2)]	B232510	06/05/19
19E1819-14 [GP1-6 (3-5)]	B232510	06/05/19
19E1819-15 [GP1-7 (3-5)]	B232510	06/05/19



## Sample Extraction Data

#### Prep Method: SW-846 3050B-SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
19E1819-01 [GP1-1 (11-13)]	B232592	1,48	50.0	06/05/19	
19E1819-02 [GP1-2 (11-13)]	B232592	1.51	50.0	06/05/19	
19E1819-03 [GP1-3 (11-13)]	B232592	1.54	50.0	06/05/19	
19E1819-04 [GP1-4 (11-13)]	B232592	1.49	50.0	06/05/19	
19E1819-05 [GP1-5 (11-13)]	B232592	1.56	50.0	06/05/19	
19E1819-06 [GP1-6 (11-13)]	B232592	1.54	50.0	06/05/19	
19E1819-07 [GP1-7 (10-12)]	B232592	1.55	50.0	06/05/19	
19E1819-08 [GP1-8 (10-12)]	B232592	1.55	50.0	06/05/19	
19E1819-09 [GP1-9 (11-13)]	B232592	1.54	50.0	06/05/19	
19E1819-10 [GP2-1 (6-8)]	B232592	1.53	50.0	06/05/19	
19E1819-11 [GP2-2 (7-9)] 19E1819-12 [GP2-3 (7-9)]	B232592	1.53	50.0	06/05/19	
1321013-12 [OLZ-2 (1-3)]	B232592	1.51	50,0	06/05/19	

## Prep Method: SW-846 7471-SW-846 7471B

Lab Number (Field ID)	Batch	Initial [g]	Final [mL]	Date	
19E1819-01 [GP1-1 (11-13)]	B232653	0.609	50.0	06/06/19	
19E1819-02 [GP1-2 (11-13)]	B232653	0.616	50.0	06/06/19	
19E1819-03 [GP1-3 (11-13)]	B232653	0.624	50.0	06/06/19	
19E1819-04 [GP1-4 (11-13)]	B232653	0.633	50.0	06/06/19	
19E1819-05 [GP1-5 (11-13)]	B232653	0.607	50.0	06/06/19	
E1819-06 [GP1-6 (11-13)]	B232653	0.626	50.0	06/06/19	,
19E1819-07 [GP1-7 (10-12)]	B232653	0.613	50.0	06/06/19	
19E1819-08 [GP1-8 (10-12)]	B232653	0.596	50.0	06/06/19	
19E1819-09 [GP1-9 (11-13)]	B232653	0.606	50.0	06/06/19	
19E1819-10 [GP2-1 (6-8)]	B232653	0.591	50.0	06/06/19	
19E1819-11 [GP2-2 (7-9)]	B232653	0.585	50.0	06/06/19	
19E1819-12 [GP2-3 (7-9)]	B232653	0.619	50,0	06/06/19	

### Prep Method: SW-846 3546-SW-846 8081B

Lab Number (Field ID)	Batch	Initial [g]	Final [mL]	Date	
19E1819-13 [GP1-2 (0-2)]	B232333	10.1	10.0	06/03/19	***************************************
19E1819-14 [GP1-6 (3-5)]	B232333	10.0	10.0	06/03/19	
19E1819-15 [GP1-7 (3-5)]	B232333	10.0	10.0	06/03/19	

#### Prep Method: SW-846 3540C-SW-846 8082A

Lab Number (Field ID)	Batch	Initial [g]	Final [mL]	Date	
19E1819-13 [GP1-2 (0-2)] 19E1819-14 [GP1-6 (3-5)]	B232317 B232317	10.3 10.2	10.0 10.0	06/03/19 06/03/19	
19E1819-15 [GP1-7 (3-5)]	B232317	10.3	10.0	06/03/19	

## Prep Method: SW-846 8151-SW-846 8151A

b Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
1819-13 [GP1-2 (0-2)]	B232364	20.2	5.00	06/04/19	
19E1819-14 [GP1-6 (3-5)]	B232364	20.0	5.00	06/04/19	
19E1819-15 [GP1-7 (3-5)]	B232364	20.2	5.00	06/04/19	



### Sample Extraction Data

## Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [g]	Final (mL)	Date	•
19E1819-01 [GP1-1 (11-13)]	B232325	6.73	10.0	06/03/19	
19E1819-02 [GP1-2 (11-13)]	B232325	6.68	10.0	06/03/19	
19E1819-03 [GP1-3 (11-13)]	B232325	8.20	10.0	06/03/19	
19E1819-04 [GP1-4 (11-13)]	B232325	8.32	10.0	06/03/19	

#### Prep Method: SW-846 5035-SW-846 8260C

Lab Number (Field ID)	Batch	Initial [g]	Final [mL]	Date	
19E1819-05 [GP1-5 (11-13)]	B232391	7.62	10.0	06/04/10	
19E1819-06 [GP1-6 (11-13)]	B232391	6.73	10.0	06/04/19	
19E1819-07 [GP1-7 (10-12)]	B232391	9.49	10.0	06/04/19	
19E1819-08 [GP1-8 (10-12)]	B232391	6.13	10.0	06/04/19 06/04/19	
19E1819-09 [GP1-9 (11-13)]	B232391	6.64	10.0	06/04/19	
19E1819-10 [GP2-1 (6-8)]	B232391	6.86	10.0	06/04/19	
19E1819-11 [GP2-2 (7-9)]	B232391	6.94	10.0	06/04/19	
19E1819-12 [GP2-3 (7-9)]	B232391	7.56	10.0	06/04/19	



## QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD	N
Batch B232325 - SW-846 5035				20701	Manuel	70KEC	Limits	KrD	Limit	Notes
Blank (B232325-BLK1)				Prepared &	Analyzed: 06/	03/19				
Acetone	ND	0.10	mg/Kg wet		maryzea. oo,					
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wct							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Brontoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							V-34
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0020	mg/Kg wei						·	
Chloroethane	ND	0.0010	mg/Kg wet							
Chloroform	ND	0.010	mg/Kg wet							
loromethane	ND	0.0040	mg/Kg wet							
2-Chlorotoluene	ND	0.010	mg/Kg wet							
4-Chlorotoluene	ND	0.0020 0.0020	mg/Kg wet mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Irans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.010	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
I,4-Dioxane	ND	0.10	mg/Kg wet							V-16
Ethylbenzene Hersehlerehutadiane	ND		mg/Kg wet							
Hexachlorobutadiene 2-Hexanone (MBK)	ND	0.0020	mg/Kg wet							
sopropylbenzene (Cumene)	ND	0.020	mg/Kg wet							
opropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
opropyttoliene (p-Cymene)  -thyl tert-Butyl Ether (MTBE)	ND		mg/Kg wet							
Methylene Chloride	ND	0.0040	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.010	mg/Kg wet							
Vaphthalene	ND	0.020	mg/Kg wet							
	ND	0.0040	mg/Kg wet							V-05



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC	ppe	RPD		
Batch B232325 - SW-846 5035		Sinn	Oms	Level	Result	76REC	Limits	RPD	Limit	Notes	
Blank (B232325-BLK1)				Prepared & A	Analyzed: 06/	03/19				····	
n-Propylbenzene	ND	0.0020	mg/Kg wet			03/17	······································				
Styrene	ND	0.0020	mg/Kg wet								
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet								
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet								
Tetrachloroethylene	ND	0.0020	mg/Kg wet								
Tetrahydrofuran	ND	0.010	mg/Kg wet								
Toluene	ND	0.0020	mg/Kg wet								
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet								
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							V-05	
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet								
1,1,2-Trichlorocthane	ND	0.0020	mg/Kg wet								
Trichloroethylene	ND	0.0020	mg/Kg wet								
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet								
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet								
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet								
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet								
Vinyl Chloride	ND	0.010	mg/Kg wet								
m+p Xylene	ND	0.0040	mg/Kg wet								
o-Xylene	ND	0.0020	nig/Kg wet								
rrogate: 1,2-Dichloroethane-d4	0.0541		mg/Kg wet	0.0500		108	70-130				
Surrogate: Toluene-d8	0.0513		mg/Kg wet	0.0500		103	70-130				
Surrogate: 4-Bromofluorobenzene	0.0512		mg/Kg wet	0.0500		102	70-130				
LCS (B232325-BS1)											
Acetone					nalyzed: 06/0	)3/19					
tert-Amyl Methyl Ether (TAME)	0.246	0.10	mg/Kg wet	0.200		123	40-160				†
Benzene	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130				
Bromobenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.6	70-130				
Bromochloromethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130				
Bromodichloromethane	0.0192	0.0020	mg/Kg wet	0.0200		96.0	70-130				
Bromoform	0.0225	0.0020 0.0020	mg/Kg wet	0.0200		112	70-130				
Bromomethane	0.0241	0.0020	mg/Kg wet	0.0200		120	70-130				
2-Butanone (MEK)	0.0149	0.010	mg/Kg wet	0.0200		74.5	40-160			V-34	†
n-Butylbenzene	0.192	0.0020	mg/Kg wet	0.200		95.8	40-160				t
sec-Butylbenzene	0.0178	0.0020	mg/Kg wet	0.0200		88.9	70-130				
tert-Butylbenzene	0.0182 0.0180	0.0020	mg/Kg wet mg/Kg wet	0.0200		90.8	70-130				
tert-Butyl Ethyl Ether (TBEE)		0.0020	mg/Kg wet	0.0200		89.9	70-130				
Carbon Disulfide	0.0194 0.0261	0.0060	mg/Kg wet	0.0200		97.0	70-130				
Carbon Tetrachloride	0.0237	0.0020	mg/Kg wet	0.0200		130	70-130				
Chlorobenzene	0.0237	0.0020	mg/Kg wet	0.0200		119	70-130			V-20	
Chlorodibromomethane	0.0193		mg/Kg wet	0.0200		96.4	70-130				
Chloroethane	0.0235		mg/Kg wet	0.0200		128	70-130				
Chloroform	0.0233		mg/Kg wet	0.0200		117	70-130				
Chloromethane	0.0210		mg/Kg wet	0.0200 0.0200		105	70-130				
2-Chlorotoluene	0.0138		mg/Kg wet			78.8	40-160				Ť
4-Chlorotoluene	0.0221		mg/Kg wet	0.0200 0.0200		111	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0222		mg/Kg wet			111	70-130				
`-Dibromoethane (EDB)	0.0173		mg/Kg wet	0.0200		86.3	70-130				
oromomethane				0.0200		112	70-130				
1,2-Dichlorobenzene	0.0207		mg/Kg wet	0.0200		104	70-130				
1,3-Dichlorobenzene	0.0183		mg/Kg wei	0.0200		91.7	70-130				
I,4-Dichlorobenzene	0.0185 0.0176		mg/Kg wet mg/Kg wet	0.0200 0.0200		92.5 88.0	70-130 70-130				



Апаlyte	Result	Reporting Limit		Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B232325 - SW-846 5035											
LCS (B232325-BS1)			-	Prepared & A	Analyzed: 06	/03/10					
Dichlorodifluoromethane (Freon 12)	0.0138	0.010	mg/Kg wet	0.0200			40.160				
1,1-Dichloroethane	0.0193	0.0020	mg/Kg wet	0.0200		69.0	40-160			L-14	
1,2-Dichloroethane	0.0228	0.0020	mg/Kg wet	0.0200		96.7	70-130				
1,1-Dichloroethylene	0.0242	0.0040	mg/Kg wet	0.0200		114	70-130				
cis-1,2-Dichloroethylene	0.0185	0.0020	mg/Kg wet	0.0200		121	70-130				
trans-1,2-Dichloroethylene	0.0198	0.0020	mg/Kg wet	0.0200		92.6	70-130				
1,2-Dichloropropane	0.0195	0.0020	mg/Kg wet			98.8	70-130				
1,3-Dichloropropane	0.0193	0.0010	mg/Kg wet	0.0200		97.3	70-130				
2,2-Dichloropropane	0.0218	0.0020	mg/Kg wet	0.0200		96.6	70-130				
1,1-Dichloropropene	0.0196	0.0020	mg/Kg wet	0.0200		109	70-130				
cis-1,3-Dichloropropene	0.0193	0.0010		0.0200		98.0	70-130				
trans-1,3-Dichloropropene	0.0229	0.0010	mg/Kg wet	0.0200		96.4	70-130				
Diethyl Ether			mg/Kg wet	0.0200		114	70-130				
Diisopropyl Ether (DIPE)	0.0215	0.010	mg/Kg wet	0.0200		108	70-130				
1,4-Dioxane	0.0179	0.0010	mg/Kg wet	0.0200		89.5	70-130				
Ethylbenzene	0.201	0.10	mg/Kg wet	0.200		101	40-160			V-16	1
Hexachlorobutadiene	0.0198	0.0020	mg/Kg wei	0.0200		99.0	70-130				
2-Hexanone (MBK)	0.0219	0.0020	mg/Kg wet	0.0200		109	70-130				
Isopropylbenzene (Cumene)	0.196	0.020	mg/Kg wet	0.200		98.1	40-160				
sopropyltoluene (p-Cymene)	0.0224	0.0020	mg/Kg wet	0.0200		112	70-130				
wiethyl tert-Butyl Ether (MTBE)	0.0184	0.0020	mg/Kg wet	0.0200		92.2	70-130				
Methylene Chloride	0.0220	0.0040	mg/Kg wet	0.0200		110	70-130				
4-Methyl-2-pentanone (MIBK)	0.0225	0.010	mg/Kg wet	0.0200		113	70-130				
Naphthalene	0.197	0.020	mg/Kg wet	0.200		98.3	40-160				1
n-Propylbenzene	0.0163	0.0040	mg/Kg wet	0.0200		81.5	70-130			V-05	
Styrene	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130				
I,1,1,2-Tetrachloroethane	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130				
I,1,2,2-Tetrachioroethane	0.0226	0.0020	mg/Kg wet	0.0200		113	70-130				
Tetrachloroethylene	0.0212	0.0010	mg/Kg wet	0.0200		106	70-130				
Tetrahydrofuran	0.0237	0.0020	mg/Kg wet	0.0200		118	70-130				
Toluene	0.0176	0.010	mg/Kg wet	0.0200		87.8	70-130				
	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130				
1,2,3-Trichlorobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130				
1,2,4-Trichlorobenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130			V-05	
1,1,1-Trichloroethane	0.0245	0.0020	mg/Kg wet	0.0200		122	70-130			V-20	
1,1,2-Trichloroethane	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130			1-20	
Trichloroethylene	0.0215	0.0020	mg/Kg wet	0.0200		107	70-130				
Frichlorofluoromethane (Freon 11)	0.0246	0.010	mg/Kg wet	0.0200		123	70-130			V-20	
1,2,3-Trichloropropane	0.0199	0.0020	mg/Kg wet	0.0200		99.7	70-130			V-20	
1,2,4-Trimethylbenzene	0.0173	0.0020	mg/Kg wet	0.0200		86.5	70-130				
,3,5-Trimethylbenzene	0.0225	0.0020	mg/Kg wet	0.0200		113	70-130				
Vinyl Chloride	0.0169		mg/Kg wet	0.0200		84.7	70-130				
n+p Xylene	0.0409		mg/Kg wet	0.0400		102	70-130				
-Xylene	0.0207		mg/Kg wet	0.0200		104	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0543				······································	<del></del> -					
urrogate: Toluene-d8	0.0482		ng/Kg wet	0.0500		109	70-130				
Surrogate: 4-Bromofluorobenzene	0.0570		ng/Kg wet	0.0500		96.5	70-130				
	0.0370	ı	ng/Kg wet	0.0500		114	70-130				



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B232325 - SW-846 5035										110103	
LCS Dup (B232325-BSD1)				Prepared & A	Analyzed: 06/0	3/19	*****				
Acetone	0.243	0.10	mg/Kg wet	0.200		122	40-160	1.12	20		<sub>t</sub>
tert-Amyl Methyl Ether (TAME)	0.0205	0.0010	mg/Kg wet	0.0200		102	70-130	0.779	20		,
Benzene	0.0186	0.0020	mg/Kg wet	0.0200		93.2	70-130	2.62	20		
Bromobenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.6	70-130	9.32	20		
Bromochloromethane	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130	0.616	20		
Bromodichloromethane	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	1.12	20		
Bromoform	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	13,2	20		
Bromomethane	0.0149	0.010	mg/Kg wet	0.0200		74.3	40-160	0.282	20	V-34	1
2-Butanone (MEK)	0.182	0.040	mg/Kg wet	0.200		91.0	40-160	5.15	20		1
n-Butylbenzene scc-Butylbenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130	1.39	20		·
tert-Butylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.4	70-130	0.386	20		
tert-Butyl Ethyl Ether (TBEE)	0.0176	0.0020	mg/Kg wet	0.0200		88.1	70-130	1.98	20		
Carbon Disulfide	0.0188	0.0010	mg/Kg wet	0.0200		94.0	70-130	3.19	20		
Carbon Tetrachloride	0.0251	0.0060	mg/Kg wet	0.0200		126	70-130	3.72	20		
Chlorobenzene	0.0238	0.0020	mg/Kg wet	0.0200		119	70-130	0.118	20	V-20	
Chlorodibromomethane	0.0192	0.0020	mg/Kg wet	0.0200		96.2	70-130	0.166	20		
Chloroethane	0.0246	0.0010	mg/Kg wet	0.0200		123	70-130	3.83	20		
Chloroform	0.0229	0.010	mg/Kg wet	0.0200		114	70-130	2.52	20		
Sloromethane	0.0208	0.0040	mg/Kg wet	0.0200		104	70-130	1.23	20		
Chlorotoluene	0.0151	0.010	mg/Kg wet	0.0200		75.7	40-160	4.12	20		ţ
4-Chlorotoluene	0.0199	0.0020	mg/Kg wet	0.0200		99.7	70-130	10.4	20		
1,2-Dibromo-3-chloropropane (DBCP)	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	8.42	20		
1,2-Dibromoethane (EDB)	0.0184	0.0020	mg/Kg wet	0.0200		92.1	70-130	6.47	20		
Dibromomethane	0.0203	0.0010 0.0020	mg/Kg wet	0.0200		102	70-130	9.43	20		
1,2-Dichlorobenzene	0.0200 0.0180	0.0020	mg/Kg wet	0.0200		100	70-130	3.42	20		
1,3-Dichlorobenzene	0.0183	0.0020	mg/Kg wet mg/Kg wet	0.0200		89.8	70-130	2.07	20		
1,4-Dichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.6	70-130	1.01	20		
Dichlorodifluoromethane (Freon 12)	0.0171	0.010	mg/Kg wet	0.0200		85.6	70-130	2.78	20		
1,1-Dichloroethane	0.0129	0.0020	mg/Kg wet	0.0200		64.3	40-160	7.02	20	L-14	t
1,2-Dichloroethane	0.0233	0.0020	mg/Kg wet	0.0200		93.0	70-130	3.92	20		
1,1-Dichloroethylene	0.0239	0.0040	mg/Kg wet	0.0200 0.0200		117	70-130	2.36	20		
cis-1,2-Dichloroethylene	0.0182	0.0020	mg/Kg wet	0.0200		119	70-130	1.44	20		
trans-1,2-Dichloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		91.1 99.4	70-130	1.61	20		
1,2-Dichloropropane	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130 70-130	0.606	20		
1,3-Dichloropropane	0.0195	0.0010	mg/Kg wet	0.0200		97.4	70-130	1.12 0.783	20		
2,2-Dichloropropane	0.0207		mg/Kg wet	0.0200		103	70-130	5.28	20		
1,1-Dichloropropene	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130	3.36	20		
cis-1,3-Dichloropropene	0.0193	0.0010	mg/Kg wet	0.0200		96.6	70-130	0.145	20 20		
rans-1,3-Dichloropropene	0.0205	0.0010	mg/Kg wet	0.0200		102	70-130	11.1	20		
Diethyl Ether	0.0209	0.010	mg/Kg wet	0.0200		105	70-130	2.80	20		
Diisopropyl Ether (DIPE)	0.0175	0.0010	mg/Kg wet	0.0200		87.5	70-130	2.29	20		
,4-Dioxane	0.181	0.10	mg/Kg wet	0.200		90.3	40-160	10.7	20	V-16	t
thylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130	4.79	20	7-10	,
Iexachlorobutadiene	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130	4.49	20		
-Hexanone (MBK)	0.198	0.020	mg/Kg wet	0.200		99.0	40-160	0.950	20		t
sopropylbenzene (Cumene)	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	8.51	20		,
Isopropyltoluene (p-Cymene)	0.0183	0.0020	mg/Kg wet	0.0200		91.6	70-130	0.620	20		
hyl tert-Butyl Ether (MTBE)	0.0214		mg/Kg wet	0.0200		107	70-130	2.73	20		
Acthylene Chloride	0.0209	0.010	mg/Kg wet	0.0200		104	70-130	7.52	20		
-Methyl-2-pentanone (MIBK)	0.194	0.020	mg/Kg wet	0.200		96.8	40-160	1.50	20		t
laphthalene	0.0149	0.0040	mg/Kg wet	0.0200		74.7	70-130	8.73	20	V-05	ŗ



Analyte	Result	Reporting Limit		Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232325 - SW-846 5035		<del></del>								Motes
LCS Dup (B232325-BSD1)				Prepared & A	Analyzed: 06/03/	19				<del></del>
n-Propylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130	10.1	30	
Styrene	0.0192	0.0020	mg/Kg wet	0.0200		96.2	70-130	8.23	20	
1,1,1,2-Tetrachloroethane	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	6.23	20	
1,1,2,2-Tetrachloroethane	0.0189	0.0010	mg/Kg wet	0.0200		94.7	70-130	11.5	20	
Tetrachloroethylene	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130	3.52	20	
Tetrahydrofuran	0.0162	0.010	mg/Kg wet	0.0200		31.1	70-130	7.93	20	
Toluene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	3.79	20	
1,2,3-Trichlorobenzene	0.0164	0.0020	mg/Kg wet	0.0200		11.9	70-130	9.03	20	
1,2,4-Trichlorobenzene	0.0168	0.0020	mg/Kg wet	0.0200		3.8	70-130	10.9	20	
,1,1-Trichloroethane	0.0241	0.0020	mg/Kg wet	0.0200		120	70-130	1.68	20	V-05
.1,2-Trichloroethane	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130		20	V-20
Trichloroethylene	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130	1.10 0.870	20	
Frichlorofluoromethane (Freon 11)	0.0242	0.010	mg/Kg wet	0.0200		21	70-130	1.89	20	
.2,3-Trichloropropane	0.0179	0.0020	mg/Kg wet	0.0200		9.4	70-130		20	V-20
,2,4-Trimethylbenzene	0.0169	0.0020	mg/Kg wet	0.0200		4.4		10.9	20	
,3,5-Trimethylbenzene	0.0209	0.0020	mg/Kg wet	0.0200		04	70-130	2.42	20	
'inyl Chloride	0.0170	0.010	mg/Kg wet	0.0200		5.0	70-130	7.65	20	
n+p Xylene	0.0396	0.0040	mg/Kg wet	0.0400		5.U 8.9	70-130	0.365	20	
-Xylene	0.0190	0.0020	mg/Kg wet	0.0200		8.9 4.8	70-130	3.36	20	
rrogate: 1,2-Dichloroethane-d4	0.0523						70-130	8.91	20	
arrogate: Toluene-d8	0.0323 0.0489		mg/Kg wet	0.0500		05	70-130			
urrogate: 4-Bromofluorobenzene	0.0546		mg/Kg wet mg/Kg wet	0.0500		7.8	70-130			
	0.0370		mg/kg wei	0.0500	10	09	70-130			
atch B232391 - SW-846 5035										
lank (B232391-BLK1)										
				repared & A	nalyzed: 06/04/1	9				
cetone	ND	0.10	mg/Kg wet	repared & A	nalyzed: 06/04/1	9				D Ac
rt-Amyl Methyl Ether (TAME)	ND ND	0.10 0.0010		repared & A	nalyzed: 06/04/1	9	·		<del></del>	R-05
rt-Amyl Methyl Ether (TAME) enzene			mg/Kg wet	repared & A	nalyzed: 06/04/1	9				R-05
rt-Amyl Methyl Ether (TAME) enzene romobenzene	ND	0.0010	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	9				R-05
rt-Amyl Methyl Ether (TAME) enzene romobenzene romochloromethane	ND ND	0.0010 0.0020	mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	9				R-05
rt-Amyl Methyl Ether (TAME) enzene romobenzene romochloromethane omodichloromethane	ND ND ND	0.0010 0.0020 0.0020 0.0020	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	9				R-05
ert-Amyl Methyl Ether (TAME) concorder comobenzene comochloromethane comodichloromethane comoform	ND ND ND ND	0.0010 0.0020 0.0020 0.0020 0.0020	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	9				R-05
rt-Amyl Methyl Ether (TAME) cazene comobenzene comochloromethane comodichloromethane comoform comomethane	ND ND ND ND ND	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A.	nalyzed: 06/04/1	9				
rt-Amyl Methyl Ether (TAME) cnzene comobenzene comochloromethane comodichloromethane comoform comomethane	ND ND ND ND ND ND	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A.	nalyzed: 06/04/1	9				V-34
rt-Amyl Methyl Ether (TAME) enzene romobenzene romochloromethane romodichloromethane romoform romomethane Butanone (MEK) Butylbenzene	ND ND ND ND ND ND	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	9				
rt-Amyl Methyl Ether (TAME) cnzene comobenzene comochloromethane comodichloromethane comoform comomethane	ND ND ND ND ND ND ND ND ND ND ND ND ND	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) cazene comobenzene comochloromethane comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene t-Butylbenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	у				V-34
rt-Amyl Methyl Ether (TAME) enzene enzene enmobenzene enmobelloromethane enmodichloromethane enmoform enmomethane Butanone (MEK) Butylbenzene ensene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	у				V-34
rt-Amyl Methyl Ether (TAME) cazene comobenzene comochloromethane comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene t-Butylbenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0020	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	у				V-34
rt-Amyl Methyl Ether (TAME) enzene enmobenzene enmochloromethane enmodichloromethane enmoform enmomethane Butanone (MEK) Butylbenzene e-Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE)	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0020 0.0010	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) carcine comobenzene comochloromethane comodichloromethane comoform comomethane Butanone (MEK) Sutylbenzene c-Butylbenzene c-Butylbenzene c-Butyl Ethyl Ether (TBEE) rbon Disulfide	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0020 0.0010 0.0060	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) carcine comobenzene comochloromethane comodichloromethane comoform comomethane Butanone (MEK) Sutylbenzene c-Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) rbon Disulfide rbon Tetrachloride	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0020 0.0020 0.0020 0.0020	mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) carcine comobenzene comobloromethane comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene c-Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) rbon Disulfide chon Tetrachloride lorobenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0020 0.0060 0.0020 0.0020	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) carcine comobenzene comochloromethane comoform comomethane Butanone (MEK) Butylbenzene t-Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) rbon Disulfide chon Tetrachloride lorodibromomethane	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0010 0.0060 0.0020 0.0020 0.0010	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) carcine comobenzene comobeloromethane comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene c-Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) rbon Disulfide cron Tetrachloride lorodibromomethane loroethane	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0010 0.0060 0.0020 0.0010 0.010	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) carcine comobenzene comochloromethane comoform comomethane Butanone (MEK) Butylbenzene c-Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) rbon Disulfide chon Tetrachloride lorodibromomethane loroethane loroethane	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0010 0.0060 0.0020 0.0010 0.0010 0.010 0.0040 0.010	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) carcine comobenzene comobloromethane comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene c-Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) crbon Disulfide crbon Tetrachloride lorodibromomethane lorocthane loroctorm coromethane	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0010 0.0060 0.0020 0.0010 0.0040 0.010 0.0040 0.010 0.0040 0.010	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) cracine comobenzene comobenzene comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene c-Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) cron Disulfide cron Tetrachloride lorodiromomethane lorodiromomethane coroform coromethane coroform coromethane controluene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0010 0.0060 0.0020 0.0010 0.0040 0.010 0.0040 0.010 0.0040 0.010 0.0020 0.0020	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
crickmyl Methyl Ether (TAME) cricence comobenzene comobloromethane comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene c-Butylbenzene c-Butylbenzene c-Butyl Ethyl Ether (TBEE) cricen Disulfide cricen Tetrachloride lorodiromomethane lorodiromomethane coroform coromethane coroform	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0010 0.0060 0.0020 0.0010 0.0040 0.0010 0.0040 0.0020 0.0010 0.0020 0.0020 0.0020	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) enzene comobenzene comobenzene comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) rbon Disulfide cron Tetrachloride clorodibromomethane lorodenane cloroform comomethane coronethane cloroform coromethane chlorotoluene chlorotoluene Dibromo-3-chloropropane (DBCP)	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0010 0.0060 0.0020 0.0010 0.0040 0.010 0.0040 0.010 0.0020 0.0020 0.0020 0.0020 0.0020	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34
rt-Amyl Methyl Ether (TAME) cercine comobenzene comobenzene comobenzene comodichloromethane comoform comomethane Butanone (MEK) Butylbenzene t-Butylbenzene t-Butyl Ethyl Ether (TBEE) cron Disulfide cron Tetrachloride clorodibromomethane cloroform coromethane cloroform coromethane coromethane coromethane coromethane coromethane chlorotoluene chlorotoluene Dibromo-3-chloropropane (DBCP) cloromocthane (EDB)	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0.0010 0.0020 0.0020 0.0020 0.0020 0.0020 0.010 0.040 0.0020 0.0020 0.0010 0.0020 0.0010 0.0040 0.0020 0.0020 0.0010 0.0020 0.0020 0.0020 0.0020 0.0020	mg/Kg wet mg/Kg wet	repared & A	nalyzed: 06/04/1	y				V-34



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232391 - SW-846 5035										
Blank (B232391-BLK1)				Prepared & A	Analyzed: 06	/04/19				······································
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet		, 200, 00,					
Dichlorodifluoromethane (Freon 12)	ND	0.010	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
is-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
rans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
,2-Dichloropropanc	ND	0.0020	mg/Kg wet							
,3-Dichloropropane	ND	0.0010	mg/Kg wet							
,2-Dichloropropane	ND	0.0020	mg/Kg wet							
,1-Dichloropropene	ND	0.0020	mg/Kg wet							
is-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
rans-1,3-Dichloropropene	ND	0100.0	mg/Kg wet							
Diethyl Ether	ND	0.010	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
,4-Dioxane	ND	0.10	mg/Kg wet							17.00
thylbenzene	ND	0.0020	mg/Kg wet							V-16
lexachlorobutadiene	ND	0.0020	mg/Kg wet							
-Hexanone (MBK)	ND	0.020	mg/Kg wet							
opropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
Isopropyitoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
lethyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
lethylene Chloride	ND	0.010	mg/Kg wet							
Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
aphthalene	ND	0.0040	mg/Kg wet							1100
Propylbenzene	ND	0.0020	mg/Kg wet							V-05
yrene	ND	0.0020	mg/Kg wet							
1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
trachloroethylene	ND	0.0020	mg/Kg wet							
trahydrofuran	ND	0.010	mg/Kg wet							
luene	ND		mg/Kg wet							
2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
2,4-Trichlorobenzene	ND		mg/Kg wet							
,1-Trichloroethane	ND		mg/Kg wet							
,2-Trichloroethane	ND		mg/Kg wet							
chloroethylene	ND		mg/Kg wet							
chlorofluoromethane (Freon 11)	ND		mg/Kg wet							
,3-Trichloropropane	ND		mg/Kg wet							
,4-Trimethylbenzene	ND		mg/Kg wei							
,5-Trimethylbenzene	ND		mg/Kg wet							
nyl Chloride	ND		mg/Kg wet							
p Xylene	ND		mg/Kg wei							
Cylene	ND		mg/Kg wet							
rogate: 1,2-Dichloroethane-d4	0.0538		ng/Kg wet	0.0500		108	70-130		···	
тоgate: Toluene-d8	0.0494		ng/Kg wet	0.0500		98.8	70-130			
rogate: 4-Bromofluorobenzene	0.0514		ng/Kg wet	0.0500		103	70-130 70-130			



## Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B232391 - SW-846 5035											
LCS (B232391-BS1)				Prepared & A	Analyzed: 06/	04/19				7	
Acetone	0.417	0.10	mg/Kg wet	0.200		208 *	40-160		·····	L-07A, R-0	
ert-Amyl Methyl Ether (TAME)	0.0222	0.0010	mg/Kg wet	0.0200		111	70-130			L-07A, K-0.	,
Benzene	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130				
Bromobenzene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130				
Bromochloromethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130				
romodichloromethane	0.0242	0.0020	mg/Kg wet	0.0200		121	70-130				
romoform	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130				
romomethane	0.0136	0.010	mg/Kg wet	0.0200		67.9	40-160			V-34	
·Butanone (MEK)	0.277	0.040	mg/Kg wet	0.200		139	40-160			R-05, L-14	
Butylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.0	70-130			K-03, L-14	
c-Butylbenzene	0.0194	0.0020	mg/Kg wet	0.0200		97.0	70-130				
rt-Butylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130				
rt-Butyl Ethyl Ether (TBEE)	0.0222	0.0010	mg/Kg wet	0.0200		111	70-130				
arbon Disulfide	0.0266	0.0060	mg/Kg wet	0.0200		133 *	70-130			1 02 3/20	
arbon Tetrachloride	0.0260	0.0020	mg/Kg wet	0.0200		130	70-130			L-02, V-20	
lorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			V-20	
ılorodibromomethane	0.0266	0.0010	mg/Kg wet	0.0200		133 +	70-130				
loroethane	0.0237	0.010	mg/Kg wet	0.0200		118	70-130			L-07	
oloroform	0.0237	0.0040	mg/Kg wet	0.0200		119	70-130				
loromethane	0.0146	0.010	mg/Kg wet	0.0200		72.9	40-160				
Chlorotoluene	0.0211	0.0020	mg/Kg wei	0.0200		105	70-130				
Chlorotoluene	0.0216	0.0020	mg/Kg wet	0.0200		103					
2-Dibromo-3-chloropropane (DBCP)	0.0184	0.0020	mg/Kg wet	0.0200		92.2	70-130				
-Dibromoethane (EDB)	0.0214	0.0010	mg/Kg wet	0.0200			70-130				
bromomethane	0.0208	0.0020	mg/Kg wet	0.0200		107	70-130				
-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200		104	70-130				
-Dichlorobenzene	0.0205	0.0020	mg/Kg wet	0.0200		99.0	70-130				
-Dichlorobenzene	0.0187	0.0020	mg/Kg wet			103	70-130				
chlorodifluoromethane (Freon 12)	0.0120	0.010	mg/Kg wet	0.0200		93.3	70-130				
-Dichloroethane	0.0226	0.0020	mg/Kg wet	0.0200		60.2	40-160			L-14	
-Dichloroethane	0.0225	0.0020	mg/Kg wet	0.0200		113	70-130				
-Dichloroethylene		0.0020		0.0200		123	70-130			V-20	
-1,2-Dichloroethylene	0.0254		mg/Kg wet	0.0200		127	70-130			V-20	
ns-1,2-Dichloroethylene	0.0223	0.0020	mg/Kg wet	0.0200		111	70-130				
-Dichloropropane	0.0225	0.0020	mg/Kg wet	0.0200		112	70-130				
Dichloropropane	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130				
-Dichloropropane	0.0207	0.0010	mg/Kg wet	0.0200		104	70-130				
-Dichloropropene	0.0245	0.0020	mg/Kg wet	0.0200		123	70-130				
1,3-Dichloropropene	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130				
is-1,3-Dichloropropene	0.0210	0.0010	mg/Kg wet	0.0200		105	70-130				
thyl Ether	0.0225	0.0010	mg/Kg wet	0.0200		113	70-130				
•	0.0218	0.010	mg/Kg wet	0.0200		109	70-130				
sopropyl Ether (DIPE)	0.0212	0.0010	mg/Kg wet	0.0200		106	70-130				
Dioxane	0.194		mg/Kg wet	0.200		97.2	40-160			V-16	
ylbenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130				
achlorobutadiene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130				
exanone (MBK)	0.250	0.020	mg/Kg wet	0.200		125	40-160				
ropylbenzene (Cumene)	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130				
opropyltoluene (p-Cymene)	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130				
hyl tert-Butyl Ether (MTBE)	0.0241	0.0040	mg/Kg wet	0.0200		120	70-130				
hylene Chloride	0.0228	0.010	mg/Kg wet	0.0200		114	70-130				
lethyl-2-pentanone (MIBK)	0.219	0.020	mg/Kg wet	0.200		109	40-160				
hthalene	0.0161		mg/Kg wet	0.0200		80.5	70-130			V-05	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232391 - SW-846 5035										
LCS (B232391-BS1)				Prepared & A	Analyzed: 06	/04/19		·		
n-Propylbenzene	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130			
Styrene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,1,1,2-Tetrachloroethane	0.0226	0.0020	mg/Kg wet	0.0200		113	70-130			
1,1,2,2-Tetrachloroethane	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130			
Tetrachloroethylene	0.0252	0.0020	mg/Kg wet	0.0200		126	70-130			
Tetrahydrofuran	0.0180	0.010	mg/Kg wet	0.0200		90.1	70-130			
Foluene	0.0217	0.0020	mg/Kg wei	0.0200		108	70-130			
,2,3-Trichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		86.8	70-130			
,2,4-Trichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		87.2	70-130			
,1,1-Trichloroethane	0.0259	0.0020	mg/Kg wei	0.0200		129	70-130			1/20
,1,2-Trichloroethane	0.0227	0.0020	mg/Kg wet	0.0200		113	70-130			V-20
Trichloroethylene	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130			
Frichlorofluoromethane (Freon 11)	0.0242	0.010	mg/Kg wei	0.0200		121	70-130			17.00
.2,3-Trichloropropane	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130 70-130			V-20
,2,4-Trimethylbenzene	0.0184	0.0020	mg/Kg wet	0.0200		91.8	70-130 70-130			
,3,5-Trimethylbenzene	0.0215	0.0020	mg/Kg wet	0.0200		107	70-130			
/inyl Chloride	0.0169	0.010	mg/Kg wet	0.0200		84.3	70-130			
n+p Xylene	0.0411	0.0040	mg/Kg wet	0.0400		103	70-130			
-Xylene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
urrogate: 1,2-Dichloroethane-d4										
rrogate: Toluene-d8	0.0528 0.0506		mg/Kg wet	0.0500		106	70-130			
urrogate: 4-Bromofluorobenzene	0.0538		mg/Kg wet	0.0500		101	70-130			
_	0.0556		mg/Kg wet	0.0500		108	70-130			
.CS Dup (B232391-BSD1)				Prepared & A	malyzed: 06/	04/19	,			
ert-Amyl Methyl Ether (TAME)	0.315	0.10	mg/Kg wet	0.200		158	40-160	27.8	• 20	L-14, R-05
enzene	0.0209	0.0010	mg/Kg wet	0.0200		104	70-130	6.15	20	
romobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.2	70-130	4.71	20	
romochloromethane	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130	7.56	20	
romodichloromethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	1.07	20	
romoform	0.0239	0.0020	mg/Kg wet	0.0200		119	70-130	1.31	20	
romomethane	0.0221	0.0020	mg/Kg wet	0.0200		110	70-130	2.97	20	
Butanone (MEK)	0.0151	0.010	mg/Kg wet	0.0200		75.5	40-160	10.6	20	V-34
, ,	0.220	0.040	mg/Kg wet	0.200		110	40-160	23.0	* 20	R-05
Butylbenzene	0.0178	0.0020	mg/Kg wet	0.0200		89.1	70-130	7.53	20	
c-Butylbenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.1	70-130	5.15	20	
rt-Butylbenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.5	70-130	7.17	20	
rt-Butyl Ethyl Ether (TBEE)	0.0211	0.0010	mg/Kg wet	0.0200		105	70-130	5.32	20	
arbon Disulfide	0.0273	0.0060	mg/Kg wet	0.0200		136 *	70-130	2.57	20	L-02, V-20
arbon Tetrachloride	0.0259	0.0020	mg/Kg wet	0.0200		129	70-130	0.547	20	V-20
hlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130	3.52	20	
nlorodibromomethane	0.0256	0.0010	mg/Kg wet	0.0200		128	70-130	3.77	20	
nloroethane	0.0232	0.010	mg/Kg wet	0.0200		116	70-130	1.89	20	
nloroform	0.0222	0.0040	mg/Kg wet	0.0200		111	70-130	6.46	20	
aloromethane	0.0157	0.010	mg/Kg wet	0.0200		78.4	40-160	7.36	20	
Chlorotoluene	0.0199	0.0020	mg/Kg wet	0.0200		99.5	70-130	5.86	20	
Chlorotoluene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	5.59	20	
2-Dibromo-3-chloropropane (DBCP)	0.0185	0.0020	mg/Kg wet	0.0200		92.4	70-130	0.163	20	
2-Dibromoethane (EDB)	0.0208	0.0010	mg/Kg wet	0.0200		104	70-130	2.62	20	
romomethane	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	2.56	20	
-Dichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200		90.1	70-130	9.39	20	
3-Dichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.6	70-130	8.19	20	
1-Dichlorobenzene								4.17	e.u	



#### QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B232391 - SW-846 5035									Ziiiii	140163	
LCS Dup (B232391-BSD1)			***************************************	Prepared & /	Analyzed: 06/	04/19					-
Dichlorodifluoromethane (Freon 12)	0.0136	0.010	mg/Kg wet	0.0200	,	67.8	40-160	11.8	70	7.14	
1,1-Dichlorocthane	0.0232	0.0020	mg/Kg wet	0.0200		116	70-130	2.77	20	L-14	ŧ
1,2-Dichloroethane	0.0239	0.0020	mg/Kg wei	0.0200		110	70-130	2.83	20		
1,1-Dichloroethylene	0.0260	0.0040	mg/Kg wet	0.0200		130	70-130	2.63	20	V-20	
cis-1,2-Dichloroethylene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	6.98	20	V-20	
trans-1,2-Dichloroethylene	0.0238	0.0020	mg/Kg wet	0.0200		119	70-130	5.69	20		
1,2-Dichloropropane	0.0194	0.0020	mg/Kg wet	0.0200		97.2	70-130	0.298	20		
1,3-Dichloropropane	0.0190	0.0010	mg/Kg wet	0.0200		95.1	70-130 70-130		20		
2,2-Dichloropropane	0.0231	0.0020	mg/Kg wet	0.0200		116		8.54	20		
1,1-Dichloropropene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	5.86	20		
cis-1,3-Dichloropropene	0.0203	0.0010	mg/Kg wet	0.0200		101	70-130	8.30	20		
trans-1,3-Dichloropropene	0.0220	0.0010	mg/Kg wet	0.0200		110	70-130	3.29	20		
Diethyl Ether	0.0233	0.010	mg/Kg wet	0.0200			70-130	2.41	20		
Diisopropyl Ether (DIPE)	0.0213	0.0010	mg/Kg wet	0.0200		117	70-130	6.88	20		
1,4-Dioxane	0.203	0.10	mg/Kg wei	0.200		107	70-130	0.433	20		
Ethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		102	40-160	4.31	20	V-16	t
Hexachlorobutadiene	0.0209	0.0020	mg/Kg wet	0.0200		96.2	70-130	3.22	20		
2-Hexanone (MBK)	0.206	0.020	mg/Kg wet	0.0200		104	70-130	2.58	20		
Isopropylbenzene (Cuinene)	0.0211	0.0020	mg/Kg wet	0.0200		103	40-160	19.2	20		ţ
-Isopropyltoluene (p-Cymene)	0.0186	0.0020	mg/Kg wet	0.0200		105	70-130	3.46	20		
lethyl tert-Butyl Ether (MTBE)	0.0266	0.0040	mg/Kg wet	0.0200		92.8	70-130	6.02	20		
Methylene Chloride	0.0247	0.010	mg/Kg wet	0.0200		133 *	70-130	10.0	20	L-07	
4-Methyl-2-pentanone (MIBK)	0.200	0.020	mg/Kg wei	0.200		124	70-130	8.03	20		
Naphthalene	0.0158	0.0040	mg/Kg wet	0.0200		99.9	40-160	8.99	20		†
n-Propylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		79.0	70-130	1.91	20	V-05	
Styrene	0.0191	0.0020	mg/Kg wet	0.0200		101	70-130	3.65	20		
1,1,1,2-Tetrachloroethane	0.0211	0.0020	mg/Kg wet	0.0200		95.4	70-130	6.49	20		
1,1,2,2-Tetrachloroethane	0.0183	0.0010	mg/Kg wet	0.0200		105	70-130	6.73	20		
Tetrachloroethylene	0.0231	0.0020	mg/Kg wet			91.3	70-130	10.9	20		
Tetrahydrofuran	0.0231	0.010	mg/Kg wet	0.0200		116	70-130	8.68	20		
Foluene	0.0206	0.0020	mg/Kg wet	0.0200		87.4	70-130	2.99	20		
1,2,3-Trichlorobenzene	0.0173	0.0020	mg/Kg wet	0.0200		103	70-130	5.19	20		
1,2,4-Trichlorobenzene	0.0173	0.0020	mg/Kg wet	0.0200		86.6	70-130	0.277	20		
,1,1-Trichloroethane	0.0248	0.0020	mg/Kg wet	0.0200		86.2	70-130	1,22	20		
,1,2-Trichlorocthanc	0.0248	0.0020	mg/Kg wet	0.0200		124	70-130	4.31	20	V-20	
Frichloroethylene		0.0020		0.0200		111	70-130	2.23	20		
Frichlorofluoromethane (Freon 11)	0.0217 0.0262	0.0020	mg/Kg wet	0.0200		109	70-130	2.20	20		
,2,3-Trichloropropane		0.0020	mg/Kg wet	0.0200		131 *	70-130	7.72	20	L-07, V-20	
,2,4-Trimethylbenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.4	70-130	8.13	20		
.3,5-Trimethylbenzene	0.0170	0.0020	mg/Kg wet	0.0200		85.2	70-130	7.52	20		
/inyl Chloride	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	4.23	20		
n+p Xylene	0.0178	0.010	mg/Kg wet	0.0200		89.0	70-130	5.33	20		
-Xylene	0.0398 0.0197	0.0040	mg/Kg wet mg/Kg wet	0.0400 0.0200		99.5 98.4	70-130 70-130	3.12 3.38	20 20		
urrogate: 1,2-Dichloroethane-d4	0.0534		mg/Kg wet	0.0500		107	70-130				
urrogate: Toluene-d8	0.0503		mg/Kg wet	0.0500		101	70-130				
urrogate: 4-Bromofluorobenzene	0.0547		mg/Kg wet	0.0500		109	70-130				



## Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit		Spike Level	Source Result	%REC	%REC	nen	RPD	
Batch B232333 - SW-846 3546			Cinto	Level	Kesun	70REC	Limits	RPD	Limit	Notes
Blank (B232333-BLK1)				Prepared: 06	/03/19 Analy	rzed: 06/06/1	0		-	
Aldrin	ND	0.0050	mg/Kg wet	- r-pz.ru. oo	, 05, 15, 11,111,	200. 00/00/1	,			
Aldrin [2C]	ND	0.0050	mg/Kg wet							
alpha-BHC	ND	0.0050	mg/Kg wet							
alpha-BHC [2C]	ND	0.0050	mg/Kg wet							
beta-BHC	ND	0.0050	mg/Kg wet							
beta-BHC [2C]	ND	0.0050	mg/Kg wet							
delta-BHC	ND	0.0050	mg/Kg wet							
delta-BHC [2C]	ND	0.0050	mg/Kg wet							
gamma-BHC (Lindane)	ND	0.0020	mg/Kg wet							
gamma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
Chlordane	ND	0.020	mg/Kg wet							
Chlordane [2C]	ND	0.020	mg/Kg wei							
1,4'-DDD	ND	0.0040	mg/Kg wet							
1.4'-DDD [2C]	ND	0.0040	mg/Kg wet							
44-DDE	ND	0.0040	mg/Kg wet							
,4'-DDE [2C]	ND	0.0040	mg/Kg wet							
,4'-DDT	ND	0.0040	mg/Kg wet							
,4'-DDT [2C]	ND	0.0040	mg/Kg wet							
Dieldrin	ND	0.0040	mg/Kg wet							
ildrin [2C]	ND	0.0040	mg/Kg wet							
andosulfan I	ND	0.0050	mg/Kg wet							
indosulfan I [2C]	ND	0.0050	mg/Kg wet							
ndosulfan II	ND	0.0080	mg/Kg wet							
ndosulfan II [2C]	ND	0.0080	mg/Kg wet							
ndosulfan Sulfate	ND	0.0080	mg/Kg wet							
ndosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
ndrin	ND	0.0080	mg/Kg wet							
ndrin [2C]	ND	0.0080	mg/Kg wet							
ndrìn Aldchyde	ND	0.0080	mg/Kg wet							
ndrin Aldehyde [2C]	ND	0.0080	mg/Kg wet							
ndrin Ketone	ND	0.0080	mg/Kg wet							
ndrin Ketone [2C]	ND	0.0080	mg/Kg wet							
eptachlor	ND	0.0050	mg/Kg wet							
eptachlor [2C]	ND	0.0050	mg/Kg wet							
eptachlor Epoxide	ND	0.0050	mg/Kg wet							
eptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
exachlorobenzene	ND	0.0060	mg/Kg wet							
exachlorobenzene [2C]	ND	0.0060	mg/Kg wet							
ethoxychlor	ND	0.050	mg/Kg wet							
ethoxychlor (2C)	ND	0.050	mg/Kg wet							
xaphene	ND	0.10	mg/Kg wet							
xaphene [2C]	ND	0.10	mg/Kg wet							
rrogate: Decachlorobiphenyl	0.176		mg/Kg wet	0.200		88.0	30-150			
rrogate: Decachlorobiphenyl [2C]	0.174		mg/Kg wei	0.200		87.1	30-150			
rrogate: Tetrachloro-m-xylene	0.179		mg/Kg wet	0.200		89.7	30-150			
rrogate: Tetrachioro-m-xylene [2C]	0.186		mg/Kg wet	0.200		93.0	30-150			



## QUALITY CONTROL

## Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit		Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232333 - SW-846 3546						17				
LCS (B232333-BS1)				Prepared: 06	/03/19 Analy	zed: 06/06/1	9			
Aldrin	0.089	0.0050	mg/Kg wet	0.100		89.1	40-140			
Aldrin [2C]	0.089	0.0050	mg/Kg wet	0.100		89.4	40-140			
alpha-BHC	0.087	0.0050	mg/Kg wet	0.100		87.2	40-140			
alpha-BHC [2C]	0.093	0.0050	mg/Kg wet	0.100		92.6	40-140			
beta-BHC	0.083	0.0050	mg/Kg wet	0.100		82.9	40-140			
beta-BHC [2C] delta-BHC	0.082	0.0050	mg/Kg wet	0.100		82.0	40-140			
delta-BHC [2C]	0.076	0.0050	mg/Kg wet	0.100		76.2	40-140			
gamma-BHC (Lindane)	0.083	0.0050	mg/Kg wet	0.100		83.5	40-140			
ganma-BHC (Lindane) [2C]	0.088	0.0020	mg/Kg wet	0.100		88.4	40-140			
4,4'-DDD	0.090	0.0020	mg/Kg wet	0.100		90.5	40-140			
4,4'-DDD [2C]	0.089	0.0040	mg/Kg wet	0.100		88.7	40-140			
4,4'-DDE	0.091	0.0040	mg/Kg wet	0.100		91.1	40-140			
4.4'-DDE [2C]	0.090	0.0040	mg/Kg wet	0.100		90.4	40-140			
4,4'-DDT	0.091 0.088	0.0040 0.0040	mg/Kg wet	0.100		91.2	40-140			
4,4'-DDT [2C]		0.0040	mg/Kg wet	0.100		88.0	40-140			
Dieldrin	0.085 0.088	0.0040	mg/Kg wet mg/Kg wet	0.100		84.7	40-140			
Dieldrin [2C]	0.088	0.0040	mg/Kg wet	0.100		88.4	40-140			
ndosulfan I	0.086	0.0050	mg/Kg wet	0.100 0.100		88.4	40-140			
iosulfan I (2C)	0.087	0.0050	mg/Kg wet	0.100		85.8	40-140			
Endosulfan II	0.078	0.0080	mg/Kg wet	0.100		86.7 78.1	40-140			
Endosulfan II [2C]	0.079	0.0080	mg/Kg wet	0.100		78.6	40-140 40-140			
Endosulfan Sulfate	0.088	0.0080	mg/Kg wet	0.100		88.1	40-140			
Endosulfan Sulfate [2C]	0.086	0.0080	mg/Kg wet	0.100		86.0	40-140			
Endrin	0.089	0.0080	mg/Kg wet	0.100		88.6	40-140			
Endrin [2C]	0.087	0.0080	mg/Kg wet	0.100		86.8	40-140			
Endrin Ketone	0.085	0.0080	mg/Kg wet	0.100		84.7	40-140			
Endrin Ketone [2C]	0.083	0.0080	mg/Kg wet	0.100		82.9	40-140			
Heptachlor	0.066	0.0050	mg/Kg wet	0.100		65.8	40-140			
Heptachlor [2C]	0.088	0.0050	mg/Kg wet	0.100		88.5	40-140			
Heptachlor Epoxide	0.085	0.0050	mg/Kg wet	0.100		85.1	40-140			
Heptachlor Epoxide [2C]	0.085	0.0050	mg/Kg wet	0.100		84.8	40-140			
Hexachlorobenzene	0.10	0.0060	mg/Kg wet	0.100		101	40-140			
Hexachlorobenzene [2C]	0.094	0.0060	mg/Kg wet	0.100		93.5	40-140			
Methoxychlor	0.084	0.050	mg/Kg wet	0.100		84.2	40-140			
Methoxychlor [2C]	0.084	0.050	mg/Kg wet	0.100		83.9	40-140			
Surrogate: Decachlorobiphenyl	0.182		mg/Kg wet	0.200		91.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.180		mg/Kg wet	0.200		89.9	30-150			
Surrogate: Tetrachloro-m-xylene	0.184		mg/Kg wet	0.200		92.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.192		mg/Kg wct	0.200		96.1	30-150			
LCS Dup (B232333-BSD1)			T	renared 064	03/19 Analyz	od• 06/06/14	<b>.</b>			
Aldrin	0.092	0.0050	mg/Kg wet		OSTIS MIRRYZ			210		
Aldrin [2C]	0.092	0.0050	mg/Kg wet	0.100 0.100		92.0	40-140	3.19	30	
lpha-BHC	0.089	0.0050	mg/Kg wet	0.100		92.7 80.7	40-140	3.63	30	
ilpha-BHC [2C]	0.096	0.0050	mg/Kg wet	0.100		89.2 95.8	40-140 40-140	2.37	30	
cea-BHC	0.085	0.0050	mg/Kg wet	0.100		93.8 84.8	40-140	3.39	30	
-BHC [2C]	0.084	0.0050	mg/Kg wet	0.100		84.0		2.26	30	
а-внс	0.078	0.0050	mg/Kg wet	0.100			40-140 40-140	2.40	30	
lelta-BHC [2C]	0.078	0.0050	mg/Kg wet	0.100		77.9 85.4	40-140	2.27	30	
amma-BHC (Lindane)	0.091	0.0020	mg/Kg wet	0.100		85.4 00.5	40-140	2.35	30	
gamma-BHC (Lindane) [2C]	0.091	0.0020	mg/Kg wet	0.100		90.5	40-140	2.41	30	
· · · · · ·	0.073			0.100		92.6	40-140	2.35	30	



## Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232333 - SW-846 3546										Trotes
LCS Dup (B232333-BSD1)				Prepared: 06	/03/19 Analy	zed: 06/06/1	10			
4,4'-DDD	0.091	0.0040	nig/Kg wet	0.100		91.4	40-140	2.99	20	
4,4'-DDD [2C]	0.094	0.0040	mg/Kg wet	0.100		93.9	40-140	3.10	30	
1,4'-DDE	0.094	0.0040	mg/Kg wet	0.100		93.8	40-140	3.67	30 30	
1,4'-DDE [2C]	0.094	0.0040	mg/Kg wet	0.100		94.3	40-140			
.4'-DDT	0.090	0.0040	mg/Kg wet	0.100		90.3	40-140	3.33 2.66	30	
I,4'-DDT [2C]	0.088	0.0040	mg/Kg wet	0.100		87.9	40-140		30	
Dieldrin	0.091	0.0040	mg/Kg wet	0.100		91.0	40-140 40-140	3.71	30	
Dieldrin [2C]	0.091	0.0040	mg/Kg wet	0.100		91.0	40-140	2.96	30	
ndosulfan I	0.088	0.0050	mg/Kg wet	0.100		88.3		3.14	30	
ndosulfan I [2C]	0.090	0.0050	mg/Kg wet	0.100		90.5	40-140	2.86	30	
ndosulfan II	0.080	0.0080	mg/Kg wet	0.100			40-140	4.22	30	
ndosulfan II [2C]	0.081	0.0080	mg/Kg wet	0.100		80.5	40-140	2.96	30	
ndosulfan Sulfate	0.090	0.0080	mg/Kg wet	0.100		81.0	40-140	2.98	30	
ndosulfan Sulfate [2C]	0.088	0.0080	mg/Kg wet	0.100		89.7	40-140	1.86	30	
ndrin	0.091	0.0080	mg/Kg wet	0.100		87.6	40-140	1.86	30	
ndrin [2C]	0.090	0.0080	mg/Kg wet			91.0	40-140	2.67	30	
ndrin Ketone	0.087	0.0080	mg/Kg wet	0.100		89.6	40-140	3.17	30	
ndrin Ketone [2C]	0.085	0.0080	mg/Kg wet	0.100		86.5	40-140	2.20	30	
eptachlor	0.068	0.0050	mg/Kg wet	0.100		84.5	40-140	1.97	30	
eptachlor [2C]	0.008	0.0050		0.100		68.2	40-140	3.57	30	
eptachlor Epoxide		0.0050	mg/Kg wet	0.100		92.3	40-140	4.23	30	
eptachlor Epoxide [2C]	0.088	0.0050	mg/Kg wet	0.100		87.8	40-140	3.07	30	
exachlorobenzene	0.087		mg/Kg wet	0.100		87.5	40-140	3.04	30	
exachlorobenzene [2C]	0.11	0.0060 0.0060	mg/Kg wet	0.100		105	40-140	3.54	30	
ethoxychlor	0.097	0.0060	mg/Kg wet	0.100		97.2	40-140	3.83	30	
ethoxychlor [2C]	0.087		mg/Kg wet	0.100		86.8	40-140	2.98	30	
	0.088	0.050	mg/Kg wet	0.100		87.8	40-140	4.49	30	
rrogate: Decachlorobiphenyl	0.189		mg/Kg wet	0.200		94.5	30-150			1011
trogate: Decachlorobiphenyl [2C]	0.187		mg/Kg wet	0.200		93.7	30-150			
irrogate: Tetrachloro-m-xylene	0.192		mg/Kg wet	0.200		96.1	30-150			
rrogate: Tetrachioro-m-xylene [2C]	0.196		mg/Kg wet	0.200		97.8	30-150			



## Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit		Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232364 - SW-846 8151									Little	Ivoles
Blank (B232364-BLK1)				Prepared: 06	/04/19 Analy	zed: 06/10/1	0			·
2,4-D	ND	24	μg/kg wet			zea. 00/10/1				<del></del>
2,4-D [2C]	ND	24	μg/kg wet							
2,4-DB	ND	24	μg/kg wet							
2,4-DB [2C]	ND	24	µg/kg wet							
2,4,5-TP (Silvex)	ND	2.4	µg/kg wet							
2,4,5-TP (Silvex) [2C]	ND	2.4	µg/kg wet							
2,4,5-T	ND	2.4	μg/kg wet							
2,4,5-T [2C]	ND	2.4	µg/kg wet							
Dalapon	ND	60	µg/kg wet							
Dalapon [2C]	ND	60	μg/kg wet							
Dicamba	ND	2.4	μg/kg wet							
Dicamba [2C]	ND	2.4	μg/kg wet							
Dichloroprop	ND	24	μg/kg wet							
Dichloroprop [2C]	ND	24	μg/kg wet							
Dinoseb	ND	12	μg/kg wet							
Dinoseb [2C]	ND	12	μg/kg wet							
/ICPA	ND	2400	μg/kg wet							
1CPA [2C]	ND	2400	μg/kg wet							
АСРР	ND	2400	μg/kg wet							
1CPP [2C]	ND	2400	μg/kg wet							
urrogate: 2,4-Dichlorophenylacetic acid	74.6		μg/kg wet	95.2	<del></del>	78.3	30.160			
итоgate: 2,4-Dichlorophenylacetic acid 2C]	75.2		μg/kg wet	95.2		79.0	30-150 30-150			
CS (B232364-BS1)			1	Prepared: 06/	04/10 Analy					
4-D	117	25	μg/kg wet	125	OWID Milaly2					
4-D [2C]	118	25	μg/kg wet	125		93.8	40-140			
4-DB	121	25	μg/kg wet	125		94.5	40-140			
4-DB [2C]	120	25	μg/kg wet	125		97.1	40-140			
4,5-TP (Silvex)	12.4	2.5	μg/kg wet	12.5		96.0	40-140			
4,5-TP (Silvex) [2C]	12.2	2.5	μg/kg wet	12.5		99.1	40-140			
4,5-T	12.3	2.5	μg/kg wet	12.5		97.6	40-140			
4,5-T [2C]	26.7	2.5	μg/kg wet	12.5		98.4	40-140			
alapon	214	62	μg/kg wet	312		214 *	40-140			L-11
alapon [2C]	214	62	μg/kg wet	312		68.4	40-140			
camba	11.3	2.5	μg/kg wet	12.5		68.6	40-140			
camba [2C]	11.4	2.5	μg/kg wet	12.5		90.1	40-140			
chloroprop	122	25	μg/kg wet	12.5		90.9	40-140			
chloroprop [2C]	125	25	μg/kg wet	125		97.5	40-140			
noseb	19.0	12	μg/kg wet	62.5		100	40-140			
noseb [2C]	21.6	12	μg/kg wet	62.5		30.4	0-42.4			
CPA	10800	2500	μg/kg wet	12500		34.6	0-41.1			
CPA [2C]	12100	2500	μg/kg wet	12500		86.4	40-140			
СРР	11600	2500	μg/kg wet	12500		96.5	40-140			
CPP [2C]	11200	2500	μg/kg wet	12500		92.5 89.4	40-140 40-140			
rogate: 2,4-Dichlorophenylacetic acid	91.6		μg/kg wet	100						
Togate: 2,4-Dichlorophenylacetic acid	90.2		LANG MEI	100		91.6	30-150			



## Herbicides by GC/ECD - Quality Control

Analyte	Result_	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232364 - SW-846 8151										110103
LCS Dup (B232364-BSD1)		-		Prepared: 06	/04/19 Analy	zcd: 06/10/	19			·
2,4-D	105	25	μg/kg wet	125		84.3	40-140	10.7	30	
2,4-D [2C]	109	25	µg/kg wet	125		87.2	40-140	8.04	30	
2,4-DB	104	25	μg/kg wet	125		83.0	40-140	15.7	30 30	
2,4-DB [2C]	109	25	µg/kg wet	125		87.1	40-140	9.70	30 30	
2,4,5-TP (Silvex)	11.0	2.5	μg/kg wet	12.5		87.8	40-140	12.2	30	
2,4,5-TP (Silvex) [2C]	10.8	2.5	μg/kg wet	12.5		86.7	40-140	11.8	30	
2,4,5-T	11.1	2,5	μg/kg wet	12.5		89.2	40-140	9.86	30	
2,4,5-T [2C]	24.8	2.5	μg/kg wet	12.5		198 *	40-140	7.57	30	
Dalapon	207	62	µg/kg wet	312		66.2	40-140	3.27		L-11
Dalapon [2C]	208	62	μg/kg wet	312		66.5	40-140	3.13	30	
Dicamba	10.4	2.5	µg/kg wet	12.5		83.4	40-140	7.77	30	
Dicamba [2C]	10.8	2.5	μg/kg wet	12.5		86.5	40-140	4.95	30	
Dichloroprop	110	25	μg/kg wet	125		88.2	40-140	10.0	30	
Dichloroprop [2C]	114	25	μg/kg wet	125		91.3	40-140	9.11	30	
Dinoseb	17.6	. 12	μg/kg wet	62.5		28.2	0-42.4	7.57	30	
Pinoseb [2C]	21.7	12	μg/kg wet	62.5		34.8	0-41.1	7.57 0.444	30	
1CPA	9570	2500	μg/kg wet	12500		76.5	40-140		30	
1CPA [2C]	11000	2500	μg/kg wet	12500		87.9	40-140	12.1	30	
1CPP	10300	2500	μg/kg wet	12500		82.4	40-140	9.33	30	
CPP [2C]	10100	2500	μg/kg wet	12500		80.6	40-140	11.6 10.4	30 30	
urrogate: 2,4-Dichlorophenylacetic acid	82.8		μg/kg wet	100		82.8	30-150			
urrogate: 2,4-Dichlorophenylacetic acid 2C]	<i>84.0</i>		µg/kg wet	100		84.0	30-150			
1atrix Spike (B232364-MS1)	Source	:e: 19E1819-	14 1	Prepared: 06/	04/10 Anabr	.ad. 06/10/1	n			
4-D	120	29	μg/kg dry	146						-
4-D [2C]	124	29	μg/kg dry	146	ND	81.9	30-150			
4-DB	130	29	μg/kg dry	146	ND	84.7	30-150			
4-DB [2C]	142	29	μg/kg dry	146	ND	88.9	30-150			
4,5-TP (Silvex)	10.5	2.9	μg/kg dry		ND	97.1	30-150			
4,5-TP (Silvex) [2C]	12.3	2.9	μg/kg dry	14.6 14.6	ND	72.1	30-150			
4,5-T	11.7	2,9	μg/kg dry	14.6 14.6	ND	83.9	30-150			
4,5-T [2C]	33.6	2.9	μg/kg dry		ND	80.0	30-150			
alapon	271	73	μg/kg dry	14.6 366	ND	229 *	30-150			MS-12
ilapon [2C]	270	73	μg/kg dry	366	ND	74.0	30-150			
camba	11.7	2.9			ND	73.7	30-150			
camba [2C]	12.2	2.9	μg/kg dry μg/kg dry	14.6	ND	80.1	30-150			
chloroprop	12.2	2.9	μg/kg dry μg/kg dry	14.6	ND	83.1	30~150			
chloroprop [2C]	129	29	μg/kg dry μg/kg dry	146	ND	88.2	30-150			
noseb	25.0	15	μg/kg dry μg/kg dry	146	ND	86.7	30-150			
noseb [2C]			·	73.2	ND	34.1	10-150			
CPA	26.8		μg/kg dry	73.2	ND	36.7	10-150			
CPA [2C]	11400		μg/kg dry	14600	ND	77.7	30-150			
CPP	12100	2900	μg/kg dry	14600	ND	82.9	30-150			
CPP [2C]	11900	2900 2900	μg/kg dry	14600	ND	81.2	30-150			
rrogate: 2,4-Dichlorophenylacetic acid	11700		μg/kg dry	14600	ND	79.9	30-150			
Togate: 2,4-Dichlorophenylacetic acid	100		ug/kg dry	117		85.4	30-150			
i)	103	1	ug/kg dry	117		88.1	30-150			



## QUALITY CONTROL

### Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232364 - SW-846 8151						***				
Matrix Spike Dup (B232364-MSD1)	Sour	e: 19E1819	-14	Prepared: 06	i/04/19 Analy:	zed: 06/10/	19			<del></del>
2,4-D	120	29	μg/kg dry	146	ND	81.8	30-150	0.0855		
2,4-D [2C]	123	29	μg/kg dry	146	ND	83.9	30-150	0.0855	30	
2,4-DB	130	29	μg/kg dry	146	ND ND	88.6	30-150		30	
2,4-DB [2C]	128	29	μg/kg dry	146	ND	87.7	30-150 30-150	0.308	30	
2,4,5-TP (Silvex)	10.6	2.9	μg/kg dry	14.6	ND ND	72.4	30-150	10.1	30	
2,4,5-TP (Silvex) [2C]	12.1	2.9	μg/kg dry	14.6	ND ND	72.4 82.7	30-150 30-150	0.415	30	
2,4,5-T	11.8	2.9	μg/kg dry	14.6	DN DN	80.4	30-150 30-150	1.42	30	
2,4,5-T [2C]	33.0	2.9	μg/kg dry	14.6	ND ND	226 *		0.479	30	
Dalapon	250	73	μg/kg dry	366	ND ND	68.4		1.70	30	MS-12
Dalapon [2C]	251	73	μg/kg dry	366	ND ND	68.7	30-150	7.89	30	
Dicamba	12.6	2.9	μg/kg dry	14.6	ND ND	86.1	30-150	6.94	30	
Dicamba [2C]	12.0	2.9	μg/kg dry	14.6		82.0	30-150	7.22	30	
Dichloroprop	130	29	μg/kg dry	14.6	ND		30-150	1,29	30	
Dichloroprop [2C]	125	29	μg/kg dry	146	ND	88.7	30-150	0.545	30	
Dinoseb	23.3	15	μg/kg dry	73.2	ND	85.2	30-150	1.81	30	
Dinoseb [2C]	25.3	15	μg/kg dry	73.2 73.2	ND	31.8	10-150	6.83	30	
MCPA	11600	2900	μg/kg dry	73.2 14600	ND	34.6	10-150	5.98	30	
MCPA [2C]	11100	2900	μg/kg dry	14600	ND	79.5	30-150	2.37	30	
ИСРР	12100	2900	μg/kg dry	14600	ND	76.1	30-150	8.54	30	
1CPP [2C]	11600	2900	μg/kg dry	14600	ND	82.3	30-150	1.36	30	
urrogate: 2,4-Dichlorophenylacetic acid				<del></del>	ND	79.5	30-150	0.429	30	
Surrogate: 2,4-Dichlorophenylacetic acid	97.8		μg/kg dry	117		83.5	30-150			
2C]	99.1		µg∕kg dry	117		84.7	30-150			



## Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232317 - SW-846 3540C									201111	Notes
Blank (B232317-BLK1)				Prepared: 06	/03/19 Analy	vzed: 06/05/1	9			
Aroclor-1016	ND	0.020	mg/Kg wet	•		,				
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wei							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
roclor-1268 [2C]	ND ND	0.020	mg/Kg wet							
urrogate: Decachlorobiphenyl	0.205		mg/Kg wet	0.200		103	30-150			
rogate: Decachlorobiphenyl [2C]	0.186		mg/Kg wet	0.200		93.2	30-150			
штоgate: Tetrachloro-m-xylene	0.182		mg/Kg wet	0.200		90.8	30-150			
urrogate: Tetrachloro-m-xylene [2C]	0.161		mg/Kg wet	0.200		80.3	30-150			
CS (B232317-BS1)	_		P	repared: 06/	03/19 Analy	zed: 06/05/19	9			
roclor-1016	0.17	0.020	mg/Kg wet	0.200		84.5	40-140		···	
roclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		84.3	40-140			
roclor-1260	0.16	0.020	mg/Kg wet	0.200		79.9	40-140			
roclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		76.9	40-140			
urrogate: Decachlorobiphenyl	0.195		mg/Kg wet	0.200		97.4	30-150			
irrogate: Decachlorobiphenyl [2C]	0.180		mg/Kg wet	0.200		90.1	30-150			
urrogate: Tetrachloro-m-xylene	0.176	;	mg/Kg wet	0.200		88.0	30-150			
rrogate: Tetrachloro-m-xylene [2C]	0.156	!	mg/Kg wet	0.200		78.2	30-150			
CS Dup (B232317-BSD1)			P	repared: 06/0	03/19 Analy:	zed: 06/05/19	)			
raclor-1016	0.17	0.020	mg/Kg wet	0.200		82.8	40-140	2.05	30	
oclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		83.9	40-140	0.446	30	
oclor-1260	0.16	0.020	mg/Kg wet	0.200		78.9	40-140	1.22	30	
oclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		76.9	40-140	0.0416	30	
rrogate: Decachlorobiphenyl	0.195	1	mg/Kg wet	0.200		97.4	30-150			
rrogate: Decachlorobiphenyl [2C]	0.182	1	mg/Kg wet	0.200		91.0	30-150			
rrogate: Tetrachloro-m-xylene	0.173		mg/Kg wet	0.200		86.7	30-150			
rrogate: Tetrachloro-m-xylene [2C]	0.154		mg/Kg wet	0.200		77.2	30-150			



### QUALITY CONTROL

## Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232351 - SW-846 3546					***					
Blank (B232351-BLK1)				Prepared: 06	/03/19 Analy	zed: 06/05/1	9			
C9-C18 Aliphatics	ND	10	mg/Kg wet			200, 00,03,1				······································
C19-C36 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C11-C22 Aromatics	ND	10	mg/Kg wet							
C11-C22 Aromatics	ND	10	mg/Kg wet	*						
Accnaphthene	ND	0.10	mg/Kg wet							
Acenaphthylene	ND	0.10	mg/Kg wet							
Anthracene	ND	0.10	mg/Kg wet							
Benzo(a)anthracene	ND	0.10	mg/Kg wet							
Benzo(a)pyrene	ND	0.10	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.10	mg/Kg wet							
denzo(g,h,i)perylene	ND	0.10	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.10	mg/Kg wet							
Chrysene	ND	0.10	mg/Kg wet							
Dibenz(a,h)anthracene Tuoranthene	ND	0.10	mg/Kg wet							
	ND	0.10	mg/Kg wet							
luorene ndeno(1,2,3-ed)pyrene	ND	0.10	mg/Kg wet							
-Methylnaphthalene	ND	0.10	mg/Kg wet							
aphthalene	ND	0.10	mg/Kg wet							
nenanthrene	ND	0.10	mg/Kg wet							
rene	ND	0.10	mg/Kg wet							
Decane	ND	0.10	mg/Kg wet							
Docosane	ND	0.10	mg/Kg wet							
Dodecane	ND ND	0.10 0.10	mg/Kg wet mg/Kg wet							
Eicosane	ND ND	0.10	mg/Kg wet							
Hexacosane	ND	0.10	mg/Kg wet							
Hexadecane	ND	0.10	mg/Kg wet							
Hexatriacontane	ND	0.10	mg/Kg wet							
Nonadecane	ND	0.10	mg/Kg wet							
Nonane	ND	0.10	mg/Kg wet							
Octacosane	ND	0.10	mg/Kg wet							
Octadecane	ND	0.10	mg/Kg wet							
Tetracosane	ND	0.10	mg/Kg wet							
Tetradecane	ND	0.10	mg/Kg wet							
Triacontane	ND	0.10	mg/Kg wet							
aphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet							
rrogate: Chlorooctadecane (COD)	3.50		mg/Kg wet	5.00		70.0	40-140			
rrogate: o-Terphenyl (OTP)	3.83		mg/Kg wet	5.00		76.6	40-140			
rrogate: 2-Bromonaphthalene	4.68		mg/Kg wet	5.00		93.7	40-140			
rrogate: 2-Fluorobiphenyl	5.12		mg/Kg wet	5.00		102	40-140			
CS (B232351-BS1)			ī	Prepared: 06/	03/19 Analyz	red: 06/05/10	)			
-C18 Aliphatics	24.8	10	mg/Kg wet	30.0	rinaly2	82.8				
9-C36 Aliphatics	32.6	10	mg/Kg wet	40.0			40-140			
adjusted C11-C22 Aromatics	68.4	10	mg/Kg wet	85.0		81.4 80.4	40-140 40-140			
enaphthene	3.55	0.10	mg/Kg wet	5.00		71.0	40-140 40-140			
naphthylene	3.21	0.10	mg/Kg wet	5.00		64.2	40-140			
hracene	4.07	0.10	mg/Kg wet	5.00		81.4	40-140			
nzo(a)anthracene	4.33	0.10	mg/Kg wet	5.00		86.7	40-140			
zo(a)pyrene	4.28	0.10	mg/Kg wei	5.00		85.7	40-140			
ızo(b)fluoranthene	4.37	0.10	mg/Kg wet	5.00		87.3	40-140			



## Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232351 - SW-846 3546										
LCS (B232351-BS1)				Prepared: 06	/03/19 Analy	zcd: 06/05/1	9			
Benzo(g,h,i)perylene	3.85	0.10	mg/Kg wet	5.00		77.1	40-140			
Benzo(k)fluoranthene	4.36	0.10	mg/Kg wet	5.00		87.2	40-140			
Chrysene	4.44	0.10	mg/Kg wet	5.00		88.7	40-140			
Dibenz(a,h)anthracene	4.26	0.10	mg/Kg wet	5.00		85.1	40-140			
Fluoranthene	4.27	0.10	mg/Kg wet	5.00		85.4	40-140			
Fluorene .	3.62	0.10	mg/Kg wet	5.00		72.4	40-140			
ndeno(1,2,3-cd)pyrene	3.97	01.0	mg/Kg wet	5.00		79.4	40-140			
?-Methylnaphthalene	2.87	0.10	mg/Kg wet	5.00		57.5	40-140			
Naphthalene	2.96	0.10	mg/Kg wet	5.00		59.3	40-140			
Phenanthrene	4.00	0.10	mg/Kg wet	5.00		80.0				
yrene	4.32	0.10	mg/Kg wet	5.00		86.4	40-140			
-Decane	2.33	0.10	mg/Kg wet	5.00			40-140			
-Docosane	4.42	0.10	mg/Kg wet	5.00		46.5	40-140			
-Dodecane	2.93	0.10	mg/Kg wet			88.3	40-140			
-Eicosane	4.17	0.10	mg/Kg wet	5.00		58.6	40-140			
-Hexacosane	4.39	0.10	mg/Kg wet	5.00		83.4	40-140			
-Hexadecane	4.12	0.10	mg/Kg wet	5.00		87.8	40-140			
-Hexatriacontane	4.12	0.10		5.00		82.3	40-140			
-Nonadecane		0.10	mg/Kg wet	5.00		83.6	40-140			
Nonane	4.20		mg/Kg wet	5.00		84.0	40-140			
-Octacosane	1.57	0.10	mg/Kg wet	5.00		31.4	30-140			
-Octadecane	4.25	0.10	mg/Kg wet	5.00		85.1	40-140			
-Tetracosane	4.26	0.10	mg/Kg wet	5.00		85.1	40-140			
-Tetradecane	4.41	0.10	mg/Kg wet	5.00		88.2	40-140			
-Triacontane	3.52	0.10	mg/Kg wet	5.00		70.4	40-140			
aphthalene-aliphatic fraction	4.20	0.10	mg/Kg wet	5.00		84.0	40-140			
Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
	ND	0.10	mg/Kg wet	5.00			0-5			
arrogate: Chlorooctadecane (COD)	3.73		mg/Kg wet	5.00		74.6	40-140			
arrogate: o-Terphenyl (OTP)	4.01		mg/Kg wet	5.00		80.3	40-140			
urrogate: 2-Bromonaphthalene	4.29		mg/Kg wet	5.00		85.7	40-140			
urogate: 2-Fluorobiphenyl	4.74		mg/Kg wet	5.00		94.7	40-140			
CS Dup (B232351-BSD1)			P	repared: 06/(	03/19 Analyz	ed: 06/05/19	)			
P-C18 Aliphatics	23.7	10	mg/Kg wet	30.0		79.1	40-140	4.51	25	
9-C36 Aliphatics	31.2	10	mg/Kg wet	40.0		78.0	40-140	4.29	25	
nadjusted C11-C22 Aromatics	68.3	10	mg/Kg wet	85.0		80.3	40-140	0.0906	25	
cenaplithene	3.62	0.10	mg/Kg wet	5.00		72.4	40-140	1.94	25	
enaphthylene	3.27		mg/Kg wet	5.00		65.4	40-140	1.88	25 25	
thracene	4.14		mg/Kg wet	5.00		82.8	40-140	1.76	25 25	
nzo(a)anthracene	4.32		mg/Kg wet	5.00		86.4	40-140	0.236	25 25	
nzo(a)pyrene	4.20		mg/Kg wet	5.00		83.9	40-140	2.07		
nzo(b)fluoranthene	4.30		mg/Kg wet	5.00		86.1	40-140		25	
nzo(g,h,i)perylene	3.78		mg/Kg wet	5.00		75.5		1.40	25	
nzo(k)fluoranthene	4.29		mg/Kg wet	5.00		75.5 85.7	40-140	2.06	25	
rysene	4.43		mg/Kg wet	5.00			40-140	1.76	25	
benz(a,h)anthracene	4.18		mg/Kg wet			88.6	40-140	0.0835	25	
oranthene	4.18		mg/Kg wet	5.00		83.6	40-140	1.83	25	
orene	4.33 3.73		mg/Kg wet	5.00		86.6	40-140	1.44	25	
eno(1,2,3-cd)pyrene				5.00		74.6	40-140	3.01	25	
Acthylnaphthalene	3.87		mg/Kg wet	5.00		77.4	40-140	2.48	25	
phthalene	2.90		mg/Kg wet	5.00		58.0	40-140	0.956	25	
enanthrene	2.92		mg/Kg wet	5.00		58.4	40-140	1.44	25	
manualenc	4.11	0.10	mg/Kg wet	5.00		82.1	40-140	2.61	25	



## Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte .	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	, RPD	RPD Limit	Notes
Batch B232351 - SW-846 3546						***************************************				
LCS Dup (B232351-BSD1)				Prepared: 06	/03/19 Analy	zed: 06/05/1	9			
Рутепе	4,40	0.10	mg/Kg wet	5.00		87.9	40-140	1.67	25	
n-Decane	2.15	0.10	mg/Kg wet	5.00		43.1	40-140	7.71	25	
n-Docosane	4.23	0.10	mg/Kg wet	5.00		84.5	40-140	4.40	25	
n-Dodecane	2.80	0.10	mg/Kg wet	5.00		56.0	40-140	4.37	25	
n-Eicosane	3.99	0.10	mg/Kg wet	5.00		79.8	40-140	4.49	25	
n-Hexacosane	4.20	0.10	mg/Kg wet	5.00		84.1	40-140	4.36	25	
n-Hexadecane	3.97	0.10	mg/Kg wet	5.00		79.3	40-140	3.69	25	
n-Hexatriacontane	4.04	0.10	mg/Kg wet	5.00		80.8	40-140	3.36	25	
n-Nonadecane	4.01	0.10	mg/Kg wet	5.00		80.3	40-140	4.58	25	
-Nonane	1.39	0.10	mg/Kg wet	5.00		27.8 *	30-140	12,2	25	L-07
n-Octacosane	4.09	0.10	mg/Kg wet	5.00		81.8	40-140	3.93	25	
-Octadecane	4.07	0.10	mg/Kg wet	5.00		81.3	40-140	4.56	25	
n-Tetracosane	4.21	0.10	mg/Kg wet	5.00		84.3	40-140	4.48	25	
-Tetradecane	3.36	0.10	mg/Kg wet	5.00		67.2	40-140	4.59	25	
-Triacontane	4.05	0.10	mg/Kg wet	5.00		81.0	40-140	3.64	25	
Vaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
-Methylnaphthalene-aliphatic fraction	ND	0.10	mg/Kg wet	5.00			0-5			
штоgate: Chlorooctadecane (COD)	3.78		mg/Kg wet	5.00		75.6	40-140			
rrogate: o-Terphenyl (OTP)	4.14		mg/Kg wet	5.00		82.7	40-140			
urrogate: 2-Bromonaphthalene	4.75		mg/Kg wet	5.00		94.9	40-140			
urrogate: 2-Fluorobiphenyl	5.21		mg/Kg wet	5.00		104	40-140			
Aatrix Spike (B232351-MS1)	Sour	ce: 19E1819	-01	Prepared: 06/	/03/19 Analy	zed: 06/05/1	9			
9-C18 Aliphatics	23.5	10	mg/Kg dry	31.1	2.64	67.1	40-140			
19-C36 Aliphatics	31.6	10	mg/Kg dry	41.5	2,95	69.1	40-140			
nadjusted C11-C22 Aromatics	61.2	10	mg/Kg dry	88.2	3.66	65.3	40-140			
cenaphthene	3.14	0.10	mg/Kg dry	5.19	ND	60.6	40-140			
cenaphthylene	2.81	0.10	mg/Kg dry	5.19	ND	54.3	40-140			
nthracene	3.67	0.10	mg/Kg dry	5.19	ND	70.8	40-140			
enzo(a)anthracene	3.92	0.10	mg/Kg dry	5.19	ND	75.5	40-140			
enzo(a)pyrene	3.81	0.10	mg/Kg dry	5.19	ND	73.5	40-140			
enzo(b)fluoranthene	3.89	0.10	mg/Kg dry	5.19	ND	75.1	40-140			
enzo(g,h,i)perylene	3.45	0.10	mg/Kg dry	5.19	ND	66.5	40-140			
enzo(k)fluoranthene	3.89	0.10	mg/Kg dry	5.19	ND	75.1	40-140			
hrysene	4.05	0.10	mg/Kg dry	5.19	ND	78.0	40-140			
ibenz(a,h)anthracene	3.83	0.10	mg/Kg dry	5.19	ND	73.9	40-140			
uoranthene	3.89	0.10	mg/Kg dry	5.19	ND	75.0	40-140			
uorene	3.25	0.10	mg/Kg dry	5.19	ND	62.6	40-140			
deno(1,2,3-cd)pyrene	3.50	0.10	mg/Kg dry	5.19	ND	67.5	40-140			
Methylnaphthalene	2.49	0.10	mg/Kg dry	5.19	ND	48.0	40-140			
phthalene	2.53	0.10	mg/Kg dry	5.19	ND	48.8	40-140			
enanthrene	3.64	0.10	mg/Kg dry	5.19	ND	70.2	40-140			
rene	3.96	0.10	mg/Kg dry	5.19	ND	76.4	40-140			
Nonane	1,45	0.10	mg/Kg dry	5.19	ND	28.0 +	30-140			L-07
	3.72		mg/Kg dry	5.19		71.7	40-140			
rrogate: Chlorooctadecane (COD)										
` ,	3.68		mg/Kg dry	5.19		71.0	40-140			
nrogate: Chlorooctadecane (COD) nrogate: o-Terphenyl (OTP) pogate: 2-Bromonaphihalene			mg/Kg dry mg/Kg dry	5.19 5.19		71.0 85.3	40-140 40-140			



## Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting . Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232351 - SW-846 3546										
Matrix Spike Dup (B232351-MSD1)	Sou	rce: 19E1819	-01	Prepared: 06	5/03/19 Analy	zed: 06/05/	9	······································		
C9-C18 Aliphatics	26.9	10	mg/Kg dry	31.1	2.64	77.9	40-140	13.3		
C19-C36 Aliphatics	33.7	10	mg/Kg dry	41.5	2.04	74.1	40-140		50	
Unadjusted C11-C22 Aromatics	72.3	10	mg/Kg dry	88.2	3.66	74.1 77.9		6.37	50	
Acenaphthene	4.21	0.10	mg/Kg dry	5.19	3.66 ND	77.9 81.1	40-140	16.7	50	
Acenaphthylene	3.87	0.10	mg/Kg dry	5.19		81.1 74.6	40-140	29.0	50	
Anthracene	4.21	0.10	mg/Kg dry	5.19	ND		40-140	31.5	50	
Benzo(a)anthracene	4,30	0.10	mg/Kg dry	5.19	ND	81.2	40-140	13.7	50	
Benzo(a)pyrene	4.21	0.10	mg/Kg dry	5.19	ND	83.0	40-140	9.35	50	
Benzo(b)fluoranthene	4.30	0.10	mg/Kg dry		ND	81.2	40-140	10.0	50	
Benzo(g,h,i)perylene	3.73	0.10	mg/Kg dry	5.19	ND	82.8	40-140	9.87	50	
Benzo(k)fluoranthene	4.30	0.10	mg/Kg dry	5.19	ND	72.0	40-140	7.89	50	
Chrysene	4.30 4.42	0.10		5.19	ND	82.8	40-140	9.79	50	
Dibenz(a,h)anthracene	4.42	0.10	mg/Kg dry	5.19	ND	85.2	40-140	8.77	50	
luoranthene		0.10	mg/Kg dry	5.19	ND	80.7	40-140	8.69	50	
luorene	4.34		mg/Kg dry	5.19	ND	83.7	40-140	11.0	50	
ndeno(1,2,3-cd)pyrene	4.07	0.10	mg/Kg dry	5.19	ND	78.6	40-140	22.6	50	
-Methylnaphthalene	3.88	0.10	mg/Kg dry	5.19	ND	74.9	40-140	10.3	50	
Vaphthalene	3.59	0.10	mg/Kg dry	5.19	ND	69.2	40-140	36.3	50	
henanthrene	3.69	0.10	mg/Kg dry	5.19	ND	71.2	40-140	37.3	50	
Tyrene	4.21	0.10	mg/Kg dry	5.19	ND	81.2	40-140	14.5	50	
Nonane	4.42	0.10	mg/Kg dry	5.19	ND	85.3	40-140	11.1	50	
	1.93	0.10	mg/Kg dry	5.19	ND	37.3	30-140	28.2	50	
urrogate: Chlorooctadecane (COD)	4.06		mg/Kg dry	5.19		78.4	40-140			
urrogate: o-Terphenyl (OTP)	4.18		mg/Kg dry	5.19		80.6	40-140			
urrogate: 2-Bromonaphthalene	5.29		mg/Kg dry	5.19		102	40-140			
urrogate: 2-Fluorobiphenyl	5.96		mg/Kg dry	5.19		115	40-140			



### Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte.	Result	Reporting Limit	Units	Spike Level	Source	WEEC	%REC	222	RPD	
Batch B232287 - MA VPH	Nosun	Linit	Units	FCAGI	Result	%REC	Limits	RPD	Limit	Notes
Blank (B232287-BLK1)										
Unadjusted C5-C8 Aliphatics	1200	10		Prepared & A	Analyzed: 06/	03/19				
C5-C8 Aliphatics	ND	10	mg/Kg wet							
Unadjusted C9-C12 Aliphatics	ND	10 10	mg/Kg wet							
C9-C12 Aliphatics	ND ND	10	mg/Kg wet mg/Kg wet							
C9-C10 Aromatics	ND ND	10	mg/Kg wet							
Benzene	ND ND	0.050	mg/Kg wet							
Butylcyclohexane	ND ND	0.050	mg/Kg wet							
Occane	ND	0.050	mg/Kg wet							
thylbenzene	ND	0.050	mg/Kg wet							
fethyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							
-Methylpentane	ND	0.050	mg/Kg wet							
aphthalene	ND	0.25	mg/Kg wet							
lonane	ND	0.050	mg/Kg wet							
entane	ND	0.050	mg/Kg wet							
oluene	ND	0.050	mg/Kg wet							
2,4-Trimethylbenzene	ND	0.050	mg/Kg wet							
2,4-Trimethylpentane	ND	0.050	mg/Kg wet							
+p Xylene	ND	0.10	mg/Kg wet							
Yylene	ND	0.050	mg/Kg wet							
urrogate: 2,5-Dibromotoluene (FID)	38.4		μg/L	40.0		96.1	70-130			
arrogate: 2,5-Dibromotoluene (PID)	37.1		μg/L	40.0		92.8	70-130			
CS (B232287-BS1)			F	repared & A	nalyzed: 06/	03/19				
enzene	0.0506	0.0010	mg/Kg wet	0.0500		101	70-130			
itylcyclohexane	0.0596	0.0010	mg/Kg wet	0.0500		119	70-130			
ccane	0.0492	0.0010	mg/Kg wet	0.0500		98.5	70-130			
hylbenzene	0.0494	0.0010	mg/Kg wet	0.0500		98.9	70-130			
ethyl tert-Butyl Ether (MTBE)	0.0479	0.0010	mg/Kg wet	0.0500		95.7	70-130			
Methylpentane	0.0612	0.0010	mg/Kg wet	0.0500		122	70-130			
phthalene	0.0485	0.0050	mg/Kg wet	0.0500		97.1	70-130			
onane	0.0589	0.0010	mg/Kg wet	0.0500		118	30-130			
ntane	0.0606	0.0010	mg/Kg wet	0.0500		121	70-130			
luene	0.0500	0.0010	mg/Kg wet	0.0500		99.9	70-130			
4.4-Trimethylbenzene	0.0493	0.0010	mg/Kg wet	0.0500		98.7	70-130			
,4-Trimethylpentane	0.0542	0.0010	mg/Kg wet	0.0500		108	70-130			
p Xylene	0.100	0.0020	mg/Kg wet	0.100		100	70-130			
Kylene	0.0499	0.0010	mg/Kg wet	0.0500		99.8	70-130			
rogate: 2,5-Dibromotoluene (FID)	41.2		μg/L	40.0		103	70-130			<del></del>
rogate: 2,5-Dibromotoluene (PID)	39.1		μg/L	40.0		97.6	70-130			
CS Dup (B232287-BSD1)				repared & A	nalyzed: 06/0	3/19				
nzene	0.0491		mg/Kg wet	0.0500		98.1	70-130	3.04	25	
tylcyclohexane	0.0579	0.0010	mg/Kg wet	0.0500		116	70-130	2.83	25	
cane	0.0469		mg/Kg wet	0.0500		93.9	70-130	4.75	25	
ylbenzene	0.0485		mg/Kg wet	0.0500		97.1	70-130	1.84	25	
thyl tert-Butyl Ether (MTBE)	0.0475		mg/Kg wet	0.0500		94.9	70-130	0.814	25	
lethylpentane	0.0586		mg/Kg wet	0.0500		117	70-130	4.37	25	
hthalene	0.0490		mg/Kg wet	0.0500		98.0	70-130	0.966	25	
nane	0.0569		mg/Kg wet	0.0500		114	30-130	3.54	25	
tane	0.0601		mg/Kg wet	0.0500		120	70-130	0.831	25	
uene	0.0488	0.0010	mg/Kg wet	0.0500		97.6	70-130	2.34	25	
4-Trimethylbenzene	0.0486	0.0010	mg/Kg wet	0.0500		97.1	70-130	1.58	25	



### Petroleum Hydrocarbons Analyses - VPH - Quality Control

Propert & Analyzed   Propert & Propert & Analyzed   Propert & Propert & Analyzed   Propert & Propert & Analyzed   Propert & Propert & Analyzed   Propert & Propert & Analyzed   Propert & Analyzed	lyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2.2.4-Trimethylpentane	h B232287 - MA VPH										
## Xylene	Dup (B232287-BSD1)				Prepared & A	Analyzed: 06/	03/19				
0.0490 0.0010 mg/Kg wet 0.0500 0.0010 mg/Kg wet 0.0500 0.0010 mg/Kg wet 0.0500 0.0010 0.0010 mg/Kg wet 0.0500 0.0010 0.00		0.0516	0.0010	mg/Kg wet	0.0500		103	70-130	4.81	25	
Surrogate: 2,5-Dibromotoluene (FID)  ### 41.5 #### 40.0 #### 40.8 ####################################		0.0981	0.0020		0.100		98.1	70-130	2.02	25	
Surrogate: 2,5-Dibromotoluene (PID)  ### 40.8  #### 40.0  #### 40.0  #### 40.0  ##### 40.0  ##### 40.0  ##################################	lene	0.0490	0.0010	mg/Kg wet	0.0500		97.9	70-130	1.91	25	
Surrogate: 2,5-Dibromotoluene (PID)   40.8   µg/L   40.0	gate: 2,5-Dibromotoluene (FID)	41.5		μg/L	40.0		104	70-130			
Blank (B232289-BLK1)	ogate: 2,5-Dibromotoluene (PID)	40.8					102	70-130			
Janagiusted C5-C3 Aliphatics	h B232289 - MA VPH										
Dadjusted C5-C8   Aliphatics   ND   10   mg/Kg wet   C5-C8   Aliphatics   ND   10   mg/Kg wet   C5-C8   Aliphatics   ND   10   mg/Kg wet   C5-C8   Aliphatics   ND   10   mg/Kg wet   C5-C12   Aliphatics   ND   10   mg/Kg wet   C5-C12   Aliphatics   ND   10   mg/Kg wet   C5-C10   Aromatics   ND   10   mg/Kg wet   C5-C10   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Aromatics   ND   0.050   mg/Kg wet   0.0500   Mg/Kg wet   0.0500   Mg/Kg wet   0.0500   Mg/Kg wet   0.0500   Mg	k (B232289-BLK1)				Prepared & A	Analyzed: 06/	03/19				
Jandjusted C9-C12 Aliphatics   ND   10   mg/Kg wet	justed C5-C8 Aliphatics	ND	10								
Dandjusted C9-C12 Aliphatics   ND   10   mg/Kg wet	· · · · · · · · · · · · · · · · · · ·		10								
December   ND	justed C9-C12 Aliphatics	ND	10	mg/Kg wet							
Serize   ND	•		10								
Suryleyclohexane   ND	10 Aromatics	ND	10	mg/Kg wet							
hetyleyclohexane hecane hecane hecane hord hecane hord hecane hord hecane hord hecane hord hecane hord hecane hord hord hecane hord hord hecane hord hord hord hecane hord hord hord hord hord hord hord hord	ene	ND	0.050	mg/Kg wet							
Staylbenzene   ND	•	ND	0.050								
Methyl tert-Buryl Ether (MTBE)   ND   0.050 mg/Kg wet		ND	0.050	mg/Kg wet							
Methylpentane		ND	0.050	mg/Kg wet							
Aphthalene   ND   0.25   mg/Kg wet   mg	, , ,	ND	0.050	mg/Kg wet							
ND   0.050 mg/Kg wet		ND	0.050	mg/Kg wet							
entane ND 0.050 mg/Kg wet oldene ND 0.050 mg/Kg wet oldene ND 0.050 mg/Kg wet ND 0.0500 mg/Kg wet ND 0.05		ND	0.25	mg/Kg wet							
ND		ND	0.050	mg/Kg wet							
ND   0.050   mg/kg wet		ND	0.050	mg/Kg wet							
ND   0.050 mg/Kg wet		ND	0.050								
ND   0.10 mg/Kg wet    -Xylene   ND   0.050 mg/Kg wet    -Xylene   ND   0.050 mg/Kg wet    -Xylene   ND   0.050 mg/Kg wet    -Xylene   ND   0.050 mg/Kg wet    -Xylene   ND   0.050 mg/Kg wet    -Xylene   ND   0.050 mg/Kg wet    -Xylene   ND   0.050 mg/Kg wet    -Xylene   ND   0.050 mg/Kg wet    -Xylene   0.0466   0.0010 mg/Kg wet   0.0500    -Xylene   0.0466   0.0010 mg/Kg wet   0.0500    -Xylene   0.0464   0.0010 mg/Kg wet   0.0500    -Xylene   0.0464   0.0010 mg/Kg wet   0.0500    -Xylene   0.0464   0.0010 mg/Kg wet   0.0500    -Xylene   0.0551   0.0010 mg/Kg wet   0.0500    -Xylene   0.0543   0.0010 mg/Kg wet   0.0500    -Xylene   0.0460   0.0010 mg/Kg wet   0.0500    -Xylene   0.0463   0	•	ND	0.050	mg/Kg wet							
-Xylene ND 0.050 mg/Kg wet  urrogate: 2,5-Dibromotoluene (FID) 41.9 μg/L 40.0  urrogate: 2,5-Dibromotoluene (PID) 39.3 μg/L 40.0  CS (B232289-BS1) Prepared & Anolyzed  enzene 0.0466 0.0010 mg/Kg wet 0.0500  utylcyclohexane 0.0575 0.0010 mg/Kg wet 0.0500  utylcyclohexane 0.0464 0.0010 mg/Kg wet 0.0500  thylbenzene 0.0464 0.0010 mg/Kg wet 0.0500  thylbenzene 0.0461 0.0010 mg/Kg wet 0.0500  thylbenzene 0.0461 0.0010 mg/Kg wet 0.0500  Methylpentane 0.0551 0.0010 mg/Kg wet 0.0500  Methylpentane 0.0551 0.0010 mg/Kg wet 0.0500  maphthalene 0.0447 0.0050 mg/Kg wet 0.0500  entane 0.0559 0.0010 mg/Kg wet 0.0500  entane 0.0559 0.0010 mg/Kg wet 0.0500  entane 0.0543 0.0010 mg/Kg wet 0.0500  entane 0.0463 0.0010 mg/Kg wet 0.0500  2,4-Trimethylbenzene 0.0460 0.0010 mg/Kg wet 0.0500  2,4-Trimethylpentane 0.0499 0.0010 mg/Kg wet 0.0500  trogate: 2,5-Dibromotoluene (FID) 43.4 μg/L 40.0	• •	ND	0.050	mg/Kg wet							
urrogate: 2,5-Dibromotoluene (FID)  41.9  μg/L  40.0		ND									
Prepared & Analyzed	ene	ND	0.050	mg/Kg wet							
CS (B232289-BS1)  enzene  0.0466 0.0010 mg/Kg wet 0.0500 utyleyelohexane 0.0575 0.0010 mg/Kg wet 0.0500	gate: 2,5-Dibromotoluene (FID)	41.9		μg/L	40.0		105	70-130			
0.0466   0.0010   mg/Kg wet   0.0500	gate: 2,5-Dibromotoluene (PID)	39.3		μg/L	40.0		98.3	70-130			
0.0466   0.0575   0.0010   mg/Kg wet   0.0500	B232289-BS1)			1	Prepared & A	Analyzed: 06/	03/19				
0.0464   0.0010   mg/Kg wet   0.0500	ne	0.0466	0.0010	mg/Kg wet	0.0500		93.2	70-130			
1.00   1.00	•	0.0575	0.0010	mg/Kg wet	0.0500		115	70-130			
Sethyl tert-Butyl Ether (MTBE)		0.0464	0.0010	mg/Kg wet	0.0500		92.9	70-130			
Methylpentane         0.0551         0.0010         mg/kg wet         0.0500           aphthalene         0.0447         0.0050         mg/kg wet         0.0500           onane         0.0559         0.0010         mg/kg wet         0.0500           entane         0.0543         0.0010         mg/kg wet         0.0500           oluene         0.0463         0.0010         mg/kg wet         0.0500           2,4-Trimethylbenzene         0.0460         0.0010         mg/kg wet         0.0500           2,4-Trimethylpentane         0.0499         0.0010         mg/kg wet         0.0500           +p Xylene         0.0931         0.0020         mg/kg wet         0.0500           Xylene         0.0463         0.0010         mg/kg wet         0.0500           urogate: 2,5-Dibromotoluene (FID)         43.4         μg/L         40.0	enzene	0.0461		mg/Kg wet	0.0500		92.2	70-130			
aphthalene 0.0447 0.0050 mg/Kg wet 0.0500 mg/Kg wet 0.05		0.0438	0.0010	mg/Kg wet	0.0500		87.6	70-130			
0.0559   0.0010   mg/Kg wet   0.0500		0.0551	0.0010	mg/Kg wet	0.0500		110	70-130			
1.000   1.0		0.0447	0.0050	mg/Kg wet	0.0500		89.3	70-130			
0.0463   0.0010   mg/Kg wet   0.0500     2,4-Trimethylpentane   0.0460   0.0010   mg/Kg wet   0.0500     2,4-Trimethylpentane   0.0499   0.0010   mg/Kg wet   0.0500     4p Xylene   0.0931   0.0020   mg/Kg wet   0.100     Xylene   0.0463   0.0010   mg/Kg wet   0.0500     Trogate: 2,5-Dibromotoluene (FID)   43.4   μg/L   40.0		0.0559	0.0010		0.0500		112	30-130			
2,4-Trimethylbenzene 0.0460 0.0010 mg/Kg wet 0.0500 2,4-Trimethylpentane 0.0499 0.0010 mg/Kg wet 0.0500 +p Xylene 0.0931 0.0020 mg/Kg wet 0.100 Xylene 0.0463 0.0010 mg/Kg wet 0.0500  rrogate: 2,5-Dibromotoluene (FID) 43.4 μg/L 40.0		0.0543	0.0010	mg/Kg wet	0.0500		109	70-130			
2,4-Trimethylpentane 0.0499 0.0010 mg/Kg wet 0.0500  +p Xylene 0.0931 0.0020 mg/Kg wet 0.100  Xylene 0.0463 0.0010 mg/Kg wet 0.0500  progate: 2,5-Dibromotoluene (FID) 43.4 μg/L 40.0		0.0463	0.0010	mg/Kg wet	0.0500		92.6	70-130			
+p Xylene 0.0931 0.0020 mg/Kg wet 0.100  Xylene 0.0463 0.0010 mg/Kg wet 0.0500  progate: 2,5-Dibromotoluene (FID) 43.4 μg/L 40.0		0.0460	0.0010		0.0500		91.9	70-130			
Xylene 0.0463 0.0010 mg/Kg wet 0.0500  Arrogate: 2,5-Dibromotoluene (FID) 43.4 μg/L 40.0		0.0499			0.0500		99.9	70-130			
Urrogate: 2,5-Dibromotoluene (FID) 43.4 µg/L 40.0		0.0931			0.100		93.1	70-130			
	ene ene	0.0463	0.0010	mg/Kg wet	0.0500		92.6	70-130			
	ate: 2,5-Dibromotoluene (FID)	43.4		μg/L	40.0		108	70-130			
Togate: 2,5-Dibromotoluene (PID) 41.1 µg/L 40.0	ate: 2,5-Dibromotoluene (PID)	41.1		μg/L	40.0		103	70-130			



## Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232289 - MA VPH										· · · · · ·
LCS Dup (B232289-BSD1)				Prepared & A	Analyzed: 06	/03/19				
Benzene	0.0476	0.0010	mg/Kg wet	0.0500	,	95.1	70-130	1.99	20	
Butylcyclohexane	0.0570	0.0010	mg/Kg wet	0.0500		114	70-130	0.936	25	
<b>Ресапе</b>	0.0459	0.0010	mg/Kg wet	0.0500		91.8	70-130		25	
ithylbenzene	0.0472	0.0010	mg/Kg wet	0.0500		94.3	70-130 70-130	1.16 2.31	25	
Acthyl tert-Butyl Ether (MTBE)	0.0442	0.0010	mg/Kg wet	0.0500		88.5	70-130 70-130		25	
-Methylpentane	0.0561	0.0010	mg/Kg wet	0.0500		112		0.979	25	
laphthalene	0.0455	0.0050	mg/Kg wet	0.0500			70-130	1.85	25	
lonane	0.0563	0.0010	mg/Kg wet	0.0500		90.9	70-130	1.76	25	
entane	0.0536	0.0010	mg/Kg wet	0.0500		113	30-130	0.677	25	
oluene	0.0474	0.0010	mg/Kg wet			107	70-130	1.34	25	
2,4-Trimethylbenzene	0.0468	0.0010	mg/Kg wet	0.0500		94.7	70-130	2.27	25	
2,4-Trimethylpentane	0.0502	0.0010	mg/Kg wet	0.0500		93.7	70-130	1.94	25	
n+p Xylene	0.0302	0.0010		0.0500		100	70-130	0.543	25	
-Xylene		0.0020	mg/Kg wet	0.100		95.3	70-130	2.29	25	
	0.0473	0.0010	mg/Kg wet	0.0500		94.6	70-130	2.16	25	
urrogate: 2,5-Dibromotoluene (FID)	47.7		μg/L	40.0		119	70-130			
urrogate: 2,5-Dibromotoluene (PID)	47.3		μg/L	40.0		118	70-130			



### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232592 - SW-846 3050B					***	***************************************			····	
Blank (B232592-BLK1)			-	Prepared: 06	/05/19 Anai	vzcd: 06/06/	19	·		
Antimony	ND	1.7	mg/Kg wet		······································					<del></del>
Arsenic	ND	1.7	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
3cryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.17	mg/Kg wet							
Chromium	ND	0.33	mg/Kg wet							
.cad	ND	0.50	mg/Kg wet							
lickel	ND	0.33	mg/Kg wet							
elenium	ND	3.3	mg/Kg wet							
ilver	ND	0.33	mg/Kg wet							
hallium	ND	1.7	mg/Kg wet							
/anadium	ND	0.67	mg/Kg wet							
inc	ND	0.67	mg/Kg wet							
CS (B232592-BS1)			1	Prepared: 06/	05/19 Analy	zed: 06/06/	19			
ntiniony	58.8	4.9	mg/Kg wet	133		44.2				
rsenic	63.0	4.9	mg/Kg wet	77.2		88.1	3-196.8			
arium	372	4.9	mg/Kg wet	391		95.2	82.4-117.4			
eryllium	207	0.49	mg/Kg wet	238		87.0	82-118			
dmium	158	0.49	mg/Kg wet	182			83-116.6			
moimon	245	0.99	mg/Kg wet	272		87.1 90.0	83.1-117.5			
ead	259	1.5	mg/Kg wet	241			81.5-118.5			
ickel	114	0.99	mg/Kg wet	125		108	81.8-118.2			
elenium	192	9.9	mg/Kg wet	216		91.6	82.4-117.5			
lver	66.3		mg/Kg wet	66.3		89.1	79-121.5			
nallium	140		mg/Kg wet			100	79.6-120.4			
nadium	87.4		mg/Kg wet	148		94.3	80.7-119.3			
пс	121		mg/Kg wet	97.6		89.5	78-121.5			
CS Dup (B232592-BSD1)	121	2.0		127		95.2	80.8-118.9			
timony				repared: 06/0	05/19 Analy:	zed: 06/06/1	9			
senic	55.9		mg/Kg wet	133		42.0	3-196.8	5.12	30	
rium	68.4		mg/Kg wet	77.2		88.6	82.4-117.4	0.524	30	
ryllium	366		mg/Kg wet	391		93.7	82-118	1.67	20	
dmium	206		mg/Kg wet	238		86.4	83-116.6	0.766	30	
romium	153		mg/Kg wet	182		84.3	83.1-117.5	3.27	20	
ad	243		mg/Kg wet	272		89.4	81.5-118.5	0.616	30	
:kel	221		mg/Kg wet	241		91.8	81.8-118.2	15.9	30	
enium	113		mg/Kg wet	125		90.1	82.4-117.5	1.66	30	
	192		mg/Kg wet	216		89.0	79-121.5	0.0101	30	
ver	67.1	0.96	mg/Kg wet	66.3		101	79.6-120.4	1.24	30	
ıllium	139		mg/Kg wet	148		94.0	80.7-119.3	0.287	30	
adium	86.4	1.9	mg/Kg wet	97.6		88.5	78-121.5	1.13	30	
С	122	1.9	mg/Kg wet	127		96.3	80.8-118.9	1.22	30	



#### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232592 - SW-846 3050B										
Duplicate (B232592-DUP1)	Sou	rce: 19E1819	-02	Prepared: 06	i/05/19 Analy	zed: 06/06/	19			
Antimony	ND	1.8	mg/Kg dry		ND			NC	35	
Arsenic	ND	1.8	mg/Kg dry		4.17			NC	35	R-04
Barium	17.7	1.8	mg/Kg dry		18.3			2.97	35	
Beryllium	0.191	0.18	mg/Kg dry		0.193			0.896	35	
Cadmium	ND	0.18	mg/Kg dry		0.269			NC	35	R-04
Chromium	6.82	0.35	mg/Kg dry		6.60			3.19	35	
Lead	9.49	0.53	mg/Kg dry		9.20			3.16	35	
Nickel	5.62	0.35	mg/Kg dry		5.60			0.335	35	
Selenium 	ND	3.5	mg/Kg dry		ND			NC	35	
Silver	ND	0.35	mg/Kg dry		ND			NC	35	
Thallium	ND	1.8	mg/Kg dry		ND			NC	35	
Vanadium 	14.2	0.70	mg/Kg dry		13.9			2.10	35	
Zinc	20.7	0.70	mg/Kg dry		20.7			0.299	35	
ARL Check (B232592-MRL1)				Prepared: 06/	/05/19 Analy:	zed: 06/06/1	9			
.ead	0.449	0.50	mg/Kg wet	0.497		90.4	80-120			
Matrix Spike (B232592-MS1)	Sour	ce: 19E1819-	-02	Prepared: 06/	/05/19 Analy:	zcd: 06/06/1	9			
ntimony	9.37	1.8	mg/Kg dry	17.8	1.41	44.7 *	75-125			MS-07
rsenic	17.6	1.8	mg/Kg dry	17.8	4.17	75.3	75-125			
arium	34.8	1.8	mg/Kg dry	17.8	18.3	92.7	75-125			
teryllium	17.0	0.18	mg/Kg dry	17.8	0.193	94.6	75-125			
Cadmium	17.0	0.18	mg/Kg dry	17.8	0.269	94.1	75-125			
Chromium	23.3	0.36	mg/Kg dry	17.8	6.60	93.8	75-125			
ead	25.4	0.53	mg/Kg dry	17.8	9.20	91.0	75-125			
lickel	22.6	0.36	mg/Kg dry	17.8	5.60	95.3	75-125			
elenium	14.9	3.6	mg/Kg dry	17.8	ND	83.9	75-125			
ilver	18.2	0.36	mg/Kg dry	17.8	ND	102	75-125			
hallium	20.7	1.8	mg/Kg dry	17.8	ND	116	75-125			
fanadium	30.6	0.71	mg/Kg dry	17.8	13.9	93.6	75-125			
inc	52.4	0.71	mg/Kg dry	35.6	20.7	89.1	75-125			
atch B232653 - SW-846 7471										
lank (B232653-BLK1)			***	Prepared: 06/	06/19 Analyz	red: 06/07/1	9			***************************************
fercury	ND	0.025	mg/Kg wet				<u>-</u>			
CS (B232653-BS1)				Prepared: 06/	06/19 Analyz	ed: 06/07/1	9			
lercury	22,4	1.9	mg/Kg wet	27.3		82.0	64-136.5			
CS Dup (B232653-BSD1)				Prepared: 06/	06/19 Analya	red: 06/07/1	9			
							-			



#### **QUALITY CONTROL**

#### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	, RPD	RPD Limit	Notes
Batch B232653 - SW-846 7471										
Duplicate (B232653-DUP1)	Source	e: 19E1819-	02	Prepared: 06	i/06/19 Anal	yzed: 06/07/	19			
Mercury	ND	0.026	mg/Kg dry		ND			NC	35	
Matrix Spike (B232653-MS1)	Source	e: 19E1819-	02	Prepared: 06	/06/19 Analy	/zed: 06/07/1	19			
Mercury	0.367	0.027	mg/Kg dry	0.361	ND	102	75-125			



Lab Sample ID:	S036798-PEM1	Analyzed: 06/04/2019
Column Number:	1	
Analyte	% Breakdown	
4,4'-DDT [1]	0.77	
Endrin [1]	2.49	
Column Number:	2	
Analyte	% Breakdown	
4,4'-DDT [2]	0.81	
Endrin [2]	2.48	

#### BREAKDOWN REPORT

ab Sample ID:	S036798-PEM2	Analyzed:	06/04/2019
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	1.07		
Endrin [1]	2.35		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	1.07		
Endrin [2]	2.39		

#### BREAKDOWN REPORT

Lab Sample ID:	S036798-PEM3	Analyzed: 06/05/2019	
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	1.83		
Endrin [1]	2.04		



Lab Sample ID:	S036798-PEM3	Analyzed: 06/05/2019
Column Number:	2	
Analyte	% Breakdown	
4,4'-DDT [2]	1.84	
Endrin [2]	2.10	

#### BREAKDOWN REPORT

Lab Sample ID:	S036798-PEM4	Analyzed:	06/05/2019
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.16		•
Endrin [1]	2.03		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	2.17		
Endrin [2]	2.06		

#### BREAKDOWN REPORT

Lab Sample ID:	S036798-PEM5	Analyzed:	06/06/2019
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.48		
Endrin [1]	2.26		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	2.50		
Endrin [2]	2.38		



Lab Sample ID:	S036816-PEM1	Analyzed: 06/06/2019
Column Number:	1	
Analyte	% Breakdown	
4,4'-DDT [1]	3.59	
Endrin [1]	2.39	
	•	
Column Number:	2	
	2 % Breakdown	
Column Number: Analyte 4,4'-DDT [2]		

#### BREAKDOWN REPORT

Lab Sample ID:	S036816-PEM2	Analyzed:	06/06/2019
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	3.13		
Endrin [1]	2.26		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	3.69		
Endrin [2]	2.85		

#### BREAKDOWN REPORT

Lab Sample ID:	S036816-PEM3	Analyzed: 06/07/2019	
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.90		
Endrin [1]	2.14		



Lab Sample ID:	S036816-PEM3	Analyzed: 06/07/2019	•
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	3.41		
Endrin [2]	2.66		



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

GP1-2 (0-	·2)	

Lab Sample ID:	19E1819-13		Date(s) Analyzed:	06/06/2019	06/06/2019
Instrument ID (1):	ECD2		Instrument ID (2):	ECD2	
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (mm

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	0/ 000
			FROM	TO	CONCENTRATION	%RPD
4,4'-DDE	1	7.256	0.000	0.000	0.57	
	2	7.313	0.000	0.000	0.49	15.1
4,4'-DDT	1	7.937	0.000	0.000	0.48	
	2	8.007	0.000	0.000	0.45	6.5



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

GP1-6\_(3-5)

Lab Sample ID:	19E1819-14		Date(s) Analyzed:	06/06/2019	06/06/20	19
Instrument ID (1):	ECD2		Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	0/ DDD
			FROM	TO	CONCENTRATION	%RPD
4,4'-DDE	1	7.255	0.000	0.000	0.027	
	2	7.313	0.000	0.000	0.026	3.8
4,4'-DDT	11	7.936	0.000	0.000	0.020	
	2	8.006	0.000	0.000	0.020	0.0



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

GP1-7\_(3-5)

Lab Sample ID:	19E1819-15		Date(s) Analyzed:	06/06/2019	06/07	/2019
Instrument ID (1):	ECD2A	•	Instrument ID (2):	ECD2B		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	0/ DDD
			FROM	ТО	CONCENTRATION	%RPD
4,4'-DDD	1	7.723	0.000	0.000	0.36	
	2	7.762	0.000	0.000	0.44	20.0
4,4'-DDE	1	7.260	0.000	0.000	5.2	
	2	7.311	0.000	0.000	4.7	10.1
4,4'-DDT	1	7.934	0.000	0.000	12	
	2	8.003	0.000	0.000	12	0.0
Chlordane	1	0.000	0.000	0.000	0.11	
	2	0.000	0.000	0.000	0.092	17.8
Dieldrin	1	7.499	0.000	0.000	0.092	
	2	7.444	0.000	0.000	0.079	15.2
Endrin	1	7.681	0.000	0.000	0.035	
	2	7.682	0.000	0.000	0.025	33.3
Endrin Ketone	1	8.628	0.000	0.000	0.013	
	2	8.628	0.000	0.000	0.049	116.0
Heptachlor Epoxide	1	6.998	0.000	0.000	0.097	
	2	6.937	0.000	0.000	0.0083	168.0



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

SW-846 8082A

Lab Sample ID:	B232317-BS1		Date(s) Analyzed:	06/05/2019	06/05/2	2019
Instrument ID (1):			Instrument ID (2):			
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
			FROM	то	CONCENTRATION	
Aroclor-1016	1	0.000	-0.030	0.030	0.17	
	2	0.000	-0.030	0.030	0.17	0.0
Aroclor-1260	1	0.000	-0.030	0.030	0.16	
	2	0.000	-0.030	0.030	0.15	6.5



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

SW-846 8082A

B232317-BSD1	<del></del>	Date(s) Analyzed:	06/05/2019	06/05/2	019
		Instrument ID (2):			
ID:	(mm)	GC Column (2):		ID:	(mm)
			Instrument ID (2):	Instrument ID (2):	Instrument ID (2):

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	%RPD
	FROM TO		CONCENTRATION	%RPD		
Aroclor-1016	1	0.000	-0.030	0.030	0.17	
	2	0.000	-0.030	0.030	0.17	0.0
Aroclor-1260	1	0.000	-0.030	0.030	0.16	
	2	0.000	-0.030	0.030	0.15	6.5



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

Lab Sample ID:	B232333-BS1		Date(s) Analyzed:	06/06/2019	06/06/2019	)
Instrument ID (1):	ECD6	_	Instrument ID (2):	ECD6		
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (	mm)

ANALYTE	COL	RT	RT W	INDOW	00110511515151	
70712772	COL		FROM	ТО	CONCENTRATION	%RPD
4,4'-DDD	1	7.382	0.000	0.000	0.089	
	2	7.393	0.000	0.000	0.091	2.2
4,4'-DDE	1	6.935	0.000	0.000	0.090	
	2	6.957	0.000	0.000	0.091	1.1
4,4'-DDT	1	7.597	0.000	0.000	0.088	***************************************
	2	7.636	0.000	0.000	0.085	3.5
Aldrin	1	6.269	0.000	0.000	0.089	
	2	6.190	0.000	0.000	0.089	0.0
alpha-BHC		5.539	0.000	0.000	0.087	
	2	5.468	0.000	0.000	0.093	6.7
beta-BHC	1	5.799	0.000	0.000	0.083	
	2	5.744	0.000	0.000	0.082	1.2
delta-BHC	11	5.919	0.000	0.000	0.076	
	2	5.933	0.000	0.000	0.083	8.8
Dieldrin	1	7.159	0.000	0.000	0.088	
	2	7.071	0.000	0.000	0.088	0.0
Endosulfan I	1	6.983	0.000	0.000	0.086	
	2	6.869	0.000	0.000	0.087	1.2
Endosulfan II	1	7.504	0.000	0.000	0.078	
	2	7.461	0.000	0.000	0.079	1.3
Endosulfan Sulfate	1_1_	8,146	0.000	0.000	0.088	
	2	7.939	0.000	0.000	0.086	2.3
Endrin	1_1_	7.334	0.000	0.000	0.089	
	2	7.299	0.000	0.000	0.087	2.3
Endrin Ketone	1 1	8.331	0.000	0.000	0.085	
	_ 2	8.306	0.000	0.000	0.083	2.4
gamma-BHC (Lindane)	1	5.744	0.000	0.000	0.088	
	2	5.689	0.000	0.000	0.090	2.3
Heptachlor	1	6.062	0.000	0.000	0.066	
	2	5.974	0.000	0.000	0.088	28.6
Heptachlor Epoxide	1	6.695	0.000	0.000	0.085	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS	

Lab Sample ID:	ab Sample ID: B232333-BS1		Date(s) Analyzed:	06/06/2019 06/06/		019
Instrument ID (1):	ECD6	<del></del>	Instrument ID (2):	ECD6		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	~~~~	
			FROM	ТО	CONCENTRATION	%RPD	
	2	6.588	0.000	0.000	0.085	0.0	
Hexachlorobenzene	1	5.430	0.000	0.000	0.10		
	2	5.380	0.000	0.000	0.094	6.2	
Methoxychlor	1	7.973	0.000	0.000	0.084		
	2	8.160	0.000	0.000	0.084	0,0	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

					_
L	CS	Du	Þ		

Lab Sample ID:	B232333-BSD1	**************************************	Date(s) Analyzed:	06/06/2019	06/06/20	19
Instrument ID (1):	ECD6		Instrument ID (2):	ECD6		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT W	INDOW	CONCENTRATION	~~~
, , , , , , , , , , , , , , , , , , , ,	002	N	FROM	то	CONCENTRATION	%RPD
4,4'-DDD	1	7.382	0.000	0.000	0.091	
	2	7.393	0.000	0.000	0.094	3.2
4,4'-DDE	1	6.934	0.000	0.000	0.094	
	2	6.956	0.000	0.000	0.094	0.0
4,4'-DDT	1	7.596	0.000	0.000	0.090	
	2	7.635	0.000	0.000	0.088	2.3
Aldrin	1	6.268	0.000	0.000	0.092	
	2	6.189	0.000	0.000	0.093	1.1
alpha-BHC	1	5.539	0.000	0.000	0.089	
	2	5.468	0.000	0.000	0.096	7.6
beta-BHC	1	5.798	0.000	0.000	0.085	
	2	5.744	0.000	0.000	0.084	1.2
delta-BHC	1	5.919	0.000	0.000	0.078	
	2	5.933	0.000	0.000	0.085	8.6
Dieldrin	1	7.159	0.000	0.000	0.091	
	2	7.071	0.000	0.000	0.091	0.0
Endosulfan I	1	6.981	0.000	0.000	0.088	
	2	6.869	0.000	0.000	0.090	2.3
Endosulfan II	1	7.503	0.000	0.000	0.080	
	2	7.461	0.000	0.000	0.081	0.0
Endosulfan Sulfate	1	8.145	0.000	0.000	0.090	<del>"</del>
	2	7.939	0.000	0.000	0.088	2,3
Endrin	1	7.333	0.000	0.000	0.091	
	2	7.299	0.000	0.000	0.090	1.1
Endrin Ketone	1	8.329	0.000	0.000	0.087	
	2	8.305	0.000	0.000	0.085	2.3
gamma-BHC (Lindane)	1	5.743	0.000	0.000	0.091	
	2	5.689	0.000	0.000	0.093	2.2
Heptachlor	1	6.061	0.000	0.000	0.068	
	2	5.973	0.000	0.000	0.092	30.0
Heptachlor Epoxide	1	6.694	0.000	0.000	0.088	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS\_Dup

Lab Sample ID: B232333-BSD1			Date(s) Analyzed:	06/06/2019 ECD6	06/06/2019	
Instrument ID (1):	ECD6		instrument ID (2):	ECD6		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
			FROM	то	CONCENTRATION	70KFD
	2	6.587	0.000	0.000	0.087	1.1
Hexachlorobenzene	1	5.430	0.000	0.000	0,11	
	2	5.380	0.000	0.000	0.097	12.6
Methoxychlor	1	7.972	0.000	0.000	0.087	
	2	8.159	0.000	0.000	0.088	1.1



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LC	cs	

Lab Sample ID:	B232364-BS1	-	Date(s) Analyzed:	06/10/2019	06/10/	2019
Instrument ID (1):	ECD 8	_	Instrument ID (2):	ECD 8		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT W	INDOW		
7.4714	LOL	Ki	FROM	то	CONCENTRATION	%RPD
2,4,5-T	1	13.826	0.000	0.000	12.3	
	2	13.967	0.000	0.000	26,7	76.0
2,4,5-TP (Silvex)	11	13,250	0.000	0.000	12.4	
	2	13.141	0.000	0.000	12.2	1.7
2,4-D	1	11.574	0.000	0.000	117	
	2	11.543	0.000	0.000	118	1.7
2,4-DB	1	14.960	0.000	0.000	121	
	2	15.004	0.000	0.000	120	0.0
Dalapon	11	3.734	0.000	0.000	214	
	2	3.402	0.000	0.000	214	1.9
Dicamba	11	9.714	0.000	0.000	11.3	
***************************************	2	9.588	0.000	0.000	11.4	3.6
Dichloroprop	11	11.122	0.000	0.000	122	
	2	10.937	0.000	0.000	125	4.1
Dinoseb	1	16.834	0.000	0.000	19.0	
	2	15.589	0.000	0.000	21.6	12.8
MCPA	1	10.444	0.000	0.000	10800	
	2	10.336	0.000	0.000	12100	9.5
MCPP	11	10.159	0.000	0.000	11600	
	2	9.905	0.000	0.000	11200	6.9



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS\_Dup

Lab Sample ID:	B232364-BSD1	************	Date(s) Analyzed:	06/10/2019	06/10/2019	
Instrument ID (1):	ECD 8		Instrument ID (2):	ECD 8		
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (1	mm)

ANALYTE	COL	RT	RT W	NDOW		
	COL	, N	FROM	то	CONCENTRATION	%RPD
2,4,5-T	1	13.823	0.000	0.000	11,1	
	2	13.966	0.000	0.000	24.8	77.1
2,4,5-TP (Silvex)	1	13.248	0.000	0.000	11.0	
	2	13.142	0.000	0.000	10.8	1.8
2,4-D	1	11.572	0.000	0.000	105	
	2	11.543	0.000	0.000	109	0.9
2,4-DB	111	14.959	0.000	0.000	104	
	2	15.003	0.000	0.000	109	8.6
Dalapon	1	3.732	0.000	0.000	207	
	2	3.399	0.000	0.000	208	1.0
Dicamba	11	9.713	0.000	0.000	10.4	
	2	9.587	0.000	0.000	10.8	7.7
Dichloroprop	11	11.121	0.000	0.000	110	
	2	10.936	0.000	0.000	114	3.6
Dinoseb	1	16.834	0.000	0.000	17.6	
	2	15.588	0.000	0.000	21.7	18.6
MCPA	1	10.441	0.000	0.000	9570	
	2	10.334	0.000	0.000	11000	13.6
MCPP	1_1_	10.158	0.000	0.000	10300	
	2	9.904	0.000	0.000	10100	1.0



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Matrix\_Spike

Lab Sample ID: B232364-MS1		·	Date(s) Analyzed:	06/10/2019	06/10/2019	9
Instrument ID (1):	ECD 8		Instrument ID (2):	ECD 8		-
GC Column (1):	ID:	(mm)	GC Column (2):	ı	ID: <i>(</i>	(mm)

	<del>- ,</del>		T			
ANALYTE	COL	RT	RT W	NDOW	CONCENTRATION	%RPD
		<u> </u>	FROM	ТО		
2,4,5-T	11	13.822	0.000	0.000	11.7	
	2	13.965	0.000	0.000	33.6	94.7
2,4,5-TP (Silvex)	1	13,247	0.000	0.000	10.5	
	2	13.139	0.000	0.000	12.3	11.2
2,4-D	1	11.571	0.000	0.000	120	-
	2	11.543	0.000	0.000	124	3.3
2,4-DB	11	14.957	0.000	0.000	130	
	2	15.001	0.000	0.000	142	8.8
Dalapon	1	3.730	0.000	0.000	271	
	2	3.396	0.000	0.000	270	0.0
Dicamba	1	9.713	0.000	0.000	11.7	
	2	9.588	0.000	0.000	12.2	1.7
Dichloroprop	1	11,121	0.000	0.000	129	
	2	10.936	0.000	0.000	127	2.3
Dinoseb	1	16.831	0.000	0.000	25.0	
	2	15.588	0.000	0.000	26.8	7.0
MCPA	1	10.443	0.000	0.000	11400	
	2	10.334	0.000	0.000	12100	9.5
MCPP	1	10.158	0.000	0.000	11900	
	2	9.905	0.000	0.000	11700	2.5



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Matrix\_Spike\_Dup

Lab Sample ID:	B232364-MSD1		Date(s) Analyzed:	06/10/2019	06/10/	2019
Instrument ID (1):	ECD 8		Instrument ID (2):	ECD 8		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
			FROM	то	CONCENTRATION	%KPD
2,4,5-T	1	13.822	0.000	0.000	11.8	
	2	13.965	0.000	0.000	33.0	93.3
2,4,5-TP (Silvex)	1	13.246	0.000	0.000	10.6	
	2	13.141	0.000	0.000	12.1	9.5
2,4-D	1	11.572	0.000	0.000	120	
	2	11.543	0.000	0.000	123	2.5
2,4-DB	1	14.959	0.000	0.000	130	
	2	15.004	0.000	0.000	128	1.6
Dalapon	1	3.730	0.000	0.000	250	
	2	3.396	0.000	0.000	251	0.4
Dicamba	1	9.713	0.000	0.000	12.6	
	2	9.588	0.000	0.000	12.0	8.0
Dichloroprop	1	11.121	0.000	0.000	130	
	2	10.935	0.000	0.000	125	3.9
Dinoseb	1	16.834	0.000	0.000	23.3	
	2	15.587	0.000	0.000	25.3	9.5
MCPA	1	10.442	0.000	0.000	11600	****
	2	10.333	0.000	0.000	11100	7.8
MCPP	1	10.158	0.000	0.000	12100	
	2	9.904	0.000	0.000	11600	3.4



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 FLAG/QUALIFIER SUMMARY

•	QC result is outside of established limits.
t	Wide recovery limits established for difficult compound.
, ‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-03	Elevated reporting limit due to matrix interference.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits.  Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
L-11	Laboratory fortified blank/laboratory control sample was outside of control limits on the confirmation column, bu within control limits on the primary column. All sample results are reported from the column within control criteria.
L-14	Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample.
MS-12	Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of complementary
O-01	effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.  Soil/methanol ratio does not meet method specifications. Excess amount of soil. Sample was completely covered with methanol, but with less than the method-specified amount.
O-32	A dilution was performed as part of the standard analytical procedure.
P-02	Sample RPD between primary and confirmatory analysis exceeded 40%. Per EPA method 8000, the lower value
R-04	Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any
RL-08	reported value for this compound.  Elevated reporting limit due to sample matrix interference. MA CAM reporting limit not met.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased as the biase aids
V-34	Data validation is not affected since sample result was "not detected" for this compound.  Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.



### 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 CERTIFICATIONS

### Certified Analyses included in this Report

Analyte	Certifications	
MADEP-EPH-04-1.1 in Soil		
C9-C18 Aliphatics	CT,NC,ME,NH-P	
C19-C36 Aliphatics	CT,NC,ME,NH-P	·
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P	
C11-C22 Aromatics	CT,NC,ME,NH-P	
Acenaphthene	CT,NC,ME,NH-P	
Accnaphthylene	CT,NC,ME,NH-P	
Anthracene	СТ,NС,МЕ,NН-Р	
Benzo(a)anthracene	CT,NC,ME,NH-P	
Benzo(a)pyrene	CT,NC,ME,NH-P	
Benzo(b)fluoranthene	CT,NC,ME,NH-P	
Benzo(g,h,i)perylene	CT,NC,ME,NH-P	
Benzo(k)fluoranthene	СТ,NС,ME,NH-Р	
Chrysene	CT,NC,ME,NH-P	
Dibenz(a,h)anthracene	CT,NC,ME,NH-P	
Fluoranthene	СТ, NC, ME, NH-P	
Fluorene	СТ, NC, ME	
Indeno(1,2,3-cd)pyrene	CT,NC,ME,NH-P	
2-Methylnaphthalene	CT,NC	
Naphthalene	CT,NC,ME,NH-P	
Phenanthrene	CT,NC,ME,NH-P	
Pyrene	CT,NC,ME,NH-P	
MADEP-VPH-Feb 2018 Rev 2.1 in Soil		
Unadjusted C5-C8 Aliphatics	CT,NC,ME,NH-P	
C5-C8 Aliphatics	CT,NC,ME,NH-P	
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P	
C9-C12 Aliphatics	CT,NC,ME,NH-P	
C9-C10 Aromatics	CT,NC,ME,NH-P	
Benzene	CT,NC,ME,NH-P	
Ethylbenzene	CT,NC,ME,NH-P	
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P	
Naphthalene	CT,NC,ME,NH-P	
Toluene	CT,NC,ME,NH-P	
m+p Xylene	CT,NC,ME,NH-P	
o-Xylene	CT,NC,ME,NH-P	
SW-846 6010D in Soil		
Antimony	CT,NH,NY,ME,VA,NC	
Arsenic	CT,NH,NY,ME,VA,NC	
Barium	CT,NH,NY,ME,VA,NC	
Beryllium	CT,NH,NY,ME,VA,NC	
Cadmium	CT,NH,NY,ME,VA,NC	
Chromium	CT,NH,NY,ME,VA,NC	
Lead	CT,NH,NY,AIHA,ME,VA,NC	
Nickel	CT,NH,NY,ME,VA,NC	
Selenium	CT,NH,NY,ME,VA,NC	
Silver	CT,NH,NY,ME,VA,NC	
Thallium	CT,NH,NY,ME,VA,NC	



## Certified Analyses included in this Report

Analyte	Certifications	
SW-846 6010D in Soil		
Vanadjum .	CT,NH,NY,ME,VA,NC	
Zinc	CT,NH,NY,ME,VA,NC	
SW-846 7471B in Soil	91,111,112, 12,11C	
Mercury	CTNU NVNO NE VA	
SIV-846 8081B in Soil	CT,NH,NY,NC,ME,VA	
Aldrin	CT,NC,NH,NY,ME,VA	
Aldrin [2C]	CT,NC,NH,NY,ME,VA	
alpha-BHC	CT,NC,NH,NY,ME,VA	
alpha-BHC [2C]	CT,NC,NH,NY,ME,VA	
beta-BHC	CT,NC,NH,NY,ME,VA	
beta-BHC [2C]	CT,NC,NH,NY,ME,VA	
delta-BHC	CT,NC,NH,NY,ME,VA	
delta-BHC [2C]	CT,NC,NH,NY,ME,VA	
gamma-BHC (Lindane)	CT,NC,NH,NY,ME,VA	
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY,ME,VA	
Chlordane	CT,NC,NH,NY,ME,VA	
Chlordane [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDD	CT,NC,NH,NY,ME,VA	
4,4'-DDD [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDE	CT,NC,NH,NY,ME,VA	
4,4'-DDE [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDT	CT,NC,NH,NY,ME,VA	
4,4'-DDT [2C]	CT,NC,NH,NY,ME,VA	
Dieldrin	CT,NC,NH,NY,ME,VA	
Dieldrin [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan I	CT,NC,NH,NY,ME,VA	
Endosulfan I [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan II	CT,NC,NH,NY,ME,VA	
Endosulfan II [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan Sulfate	CT,NC,NH,NY,ME,VA	
Endosulfan Sulfate [2C]	CT,NC,NH,NY,ME,VA	
Endrin	CT,NC,NH,NY,ME,VA	
Endrin [2C]	CT,NC,NH,NY,ME,VA	
Endrin Ketone	NC	
Endrin Ketone [2C]	NC	
Heptachlor	CT,NC,NH,NY,ME,VA	
Heptachlor (2C)	CT,NC,NH,NY,ME,VA	
Heptachlor Epoxide	CT,NC,NH,NY,ME,VA	
Heptachlor Epoxide [2C]	CT,NC,NH,NY,ME,VA	
Hexachlorobenzene	NC	
Hexachlorobenzene [2C]	NC	
Methoxychlor	CT,NC,NH,NY,ME,VA	
Methoxychlor [2C]	CT,NC,NH,NY,ME,VA	
2-846 8081B in Water		
Aldrin	CT,NC,NH,NY,ME,VA	
Aldrin [2C]	CT,NC,NH,NY,ME,VA	



Certified Analyse	includ	led in th	is Report
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SW-846 8081B in Water		
alpha-BHC	CT,NC,NH,NY,ME,VA	
alpha-BHC [2C]	CT,NC,NH,NY,ME,VA	
beta-BHC	CT,NC,NH,NY,ME,VA	
beta-BHC [2C]	CT,NC,NH,NY,ME,VA	
delta-BHC	CT,NC,NH,NY,ME,VA	
delta-BHC [2C]	CT,NC,NH,NY,ME,VA	
gamma-BHC (Lindanc)	CT,NC,NH,NY,ME,VA	
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY,ME,VA	
Chlordane	CT,NC,NH,NY,ME,VA	
Chlordane [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDD	CT,NC,NH,NY,ME,VA	
4,4'-DDD [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDE	CT,NC,NH,NY,ME,VA	
4,4'-DDE [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDT	CT,NC,NH,NY,ME,VA	
4,4'-DDT [2C]	CT,NC,NH,NY,ME,VA	
Dieldrin	CT,NC,NH,NY,ME,VA	
Dieldrin [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan I	CT,NC,NH,NY,ME,VA	
Endosulfan I [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan II	CT,NC,NH,NY,ME,VA	
Endosulfan II [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan Sulfate	CT,NC,NH,NY,ME,VA	
Endosulfan Sulfate [2C]	CT,NC,NH,NY,ME,VA	
Endrin	CT,NC,NH,NY,ME,VA	
Endrin [2C]	CT,NC,NH,NY,ME,VA	
Endrin Ketone	NC	
Endrin Ketone [2C]	NC	
Heptachlor	CT,NC,NH,NY,ME,VA	
Heptachlor (2C)	CT,NC,NH,NY,ME,VA	
Heptachlor Epoxide	CT,NC,NH,NY,ME,VA	
Heptachlor Epoxide [2C]	CT,NC,NH,NY,ME,VA	
lexachlorobenzene	NC	
fexachlorobenzene [2C]	NC	
Acthoxychlor	CT,NC,NH,NY,ME,VA	
Methoxychlor [2C]	CT,NC,NH,NY,ME,VA	
'-846 8082A in Sail		
Araclar-1016	CTNU NVMENO VA	
uroclor-1016 [2C]	CT,NH,NY,ME,NC,VA	
uroclor-1221	CT,NH,NY,ME,NC,VA	
roclor-1221 [2C]	CT,NH,NY,ME,NC,VA	
roclor-1232	CT,NH,NY,ME,NC,VA	
rocior-1232 [2C]	CT,NH,NY,ME,NC,VA	
roclor-1242	CT,NH,NY,ME,NC,VA	
	CT,NH,NY,ME,NC,VA	
roclor-1242 [2C]	CT,NH,NY,ME,NC,VA	



Certified Analyses	included	in t	his	Report
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Analyte	Certifications
SW-846 8082A in Soil	
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA
Aroclor-1254	CT,NH,NY,ME,NC,VA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA
Aroclor-1260	CT,NH,NY,ME,NC,VA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA
Aroclor-1262	NY,NC,VA
Aroclor-1262 [2C]	NY,NC,VA
Aroclor-1268	NY,NC,VA
Aroclor-1268 [2C]	NY,NC,VA
SW-846 8151A in Soil	····
2,4-D	NVA/ENGANA
2,4-D [2C]	NY,ME,NC,NH,VA,CT
2,4-DB	NY,ME,NC,NH,VA,CT
2,4-DB [2C]	NY,ME,NC,NH,VA,CT
2,4,5-TP (Silvex)	NY,ME,NC,NH,VA,CT
2,4,5-TP (Silvex) [2C]	NY,ME,NC,NH,VA,CT
2,4,5-T	NY,ME,NC,NH,VA,CT NY,ME,NC,NH,VA,CT
2,4,5-T [2C]	NY,ME,NC,NH,VA,CT
Dalapon	NY,ME,NC,NH,VA,CT
Dalapon [2C]	NY,ME,NC,NH,VA,CT
Dicamba	NY,ME,NC,NH,VA,CT
Dicamba (2C)	NY,ME,NC,NH,VA,CT
Dichloroprop	NY,ME,NC,NH,VA,CT
Dichloroprop [2C]	NY,ME,NC,NH,VA,CT
Dinoseb	NY,ME,NC,NH,VA,CT
Dinoseb [2C]	NY,ME,NC,NH,VA,CT
MCPA	NY,ME,NC,NH,VA,CT
MCPA [2C]	NY,ME,NC,NH,VA,CT
МСРР	NY,ME,NC,NH,VA,CT
MCPP [2C]	NY,ME,NC,NH,VA,CT
SW-846 8151A in Water	
2,4-D	ME,NC,NH,CT,NY,VA
2,4-D [2C]	ME,NC,NH,CT,NY,VA
2,4-DB	ME,NC,NH,CT,NY,VA
2,4-DB [2C]	ME,NC,NH,CT,NY,VA
2,4,5-TP (Silvex)	ME,NC,NH,CT,NY,VA
2,4,5-TP (Silvex) [2C]	ME,NC,NH,CT,NY,VA
2,4,5-T	ME,NC,NH,CT,NY,VA
2,4,5-T [2C]	ME,NC,NH,CT,NY,VA
Dalapon	ME,NC,NH,CT,NY,VA
Dalapon [2C]	ME,NC,NH,CT,NY,VA
Dicamba	ME,NC,NH,CT,NY,VA
	ME,NC,NH,CT;NY,VA
Dichloroprop	ME,NC,NH,CT,NY,VA
Dichloroprop [2C]	ME,NC,NH,CT,NY,VA
Dinoseb	ME,NC,NH,CT,NY,VA
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### Certified Analyses included in this Report

Analyte	Certifications
SW-846 8151A in Water	
Dinoseb [2C]	ME,NC,NH,CT,NY,VA
МСРА	NC,CT
MCPA [2C]	NC,CT
МСРР	NC,CT
MCPP [2C]	NC,CT
SIV-846 8260C in Soil	110,01
Acctone	СТ,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY
Dibromomelhane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
I,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
,2-Dichloroethane	CT,NH,NY,ME
,1-Dichloroethylene	CT,NH,NY,ME
is-1,2-Dichloroethylene	CT,NH,NY,ME
rans-1,2-Dichloroethylene	CT,NH,NY,ME
,2-Dichloropropane	CT,NH,NY,ME
,3-Dichloropropane	NH,NY,ME
,2-Dichloropropane	NH,NY,ME
,1-Dichloropropene	NH,NY,ME
is-1,3-Dichloropropene	CT,NH,NY,ME
ans-1,3-Dichloropropene	CT,NH,NY,ME
,4-Dioxane	NY
thylbenzene	
lexachlorobutadiene	CT,NH,NY,ME
<del>-</del>	NH,NY,ME



### Certified Analyses included in this Report

### CERTIFICATIONS

СТ, NH, NY, МЕ
CT,NH,NY,ME
NH,NY
NH,NY
CT,NH,NY,ME
CT,NH,NY
NH,NY,ME
NH,NY
CT,NH,NY,ME
CT,NH,NY,ME
СТ, NH, NY, МЕ
CT,NH,NY,ME
CT,NH,NY,ME
NY
NH,NY,ME
СТ, NH, NY, МЕ
CT,NH,NY,ME
CT,NH,NY,ME
CT,NH,NY,ME
NH,NY,ME
CT,NH,NY,ME
СТ, NH, NY, МЕ
СТ, NH, NY, МЕ
CT,NH,NY,ME
СТ, NH, NY, МЕ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
Alha	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2019
CT	Connecticut Department of Public Health	PH-0567	
NY	New York State Department of Health	10899 NELAP	09/30/2019
NH-S	New Hampshire Environmental Lab		04/1/2020
RI	Rhode Island Department of Health	2516 NELAP	02/5/2020
NC	North Carolina Div. of Water Quality	LAO00112	12/30/2019
NJ	New Jersey DEP	652	12/31/2019
FL	·	MA007 NELAP	06/30/2019
	Florida Department of Health	E871027 NELAP	06/30/2019
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2019
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2019
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2019
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2019

**Table of Contents** <sup>2</sup> Preservation Codes: <sup>1</sup> <u>Matrix Codes:</u> GW = Ground Water WW = Waste Water K = Sodium Hydroxide DW = Drinking Water S = Sulfuric Acid B = Sodium Bisulfate S = Summa Canister SL = Sludge SOL = Solid O = Other (please <sup>3</sup> Container Codes: A = Amber Glass Thiosulfate O = Other (please <sup>2</sup> Preservation Code T = Tedlar Bag O = Other (please O Field Filtered O Field Filtered Non Soxhlet Lab to Filter PCB ONLY Soxhlet N = Nitric Acid Container Code Lab to Filter H = HCL M = Methanol # of Containers G = Glass P = Plastic ST = Sterile = Sodium A = Air S = Soil define) = Iced /= Vial define) define) mple concentration 39 Spruce Street East Longmeadow, MA 01028 Chromatogram AIHA-LAP, LLC ને - Unknown ANALYSIS REQUESTED Doc # 381 Rev 1\_03242017 WRTA X Ŕ × <u>02 6</u> w NOH ہد × × × × MA MCP Required MCP Certification Form Required CT RCP Required RCP Certification Form Required MWRA MA State DW Required School 092B MBTA ۷ X. بد **D** LOD WATER & COJ http://www.conte.cabs.com CHAIN OF CUSTODY RECORD Per client - run soxhlet 6/3/19 mmk Municipality 10-Day Brownfield 3-Day 4-Day EXCEI CLP Like Data Pkg Required: # QISMd 7 PDF でアグラ Email To: Jue Date: Government Fax To #: 30 386 Format: 1140 (3 se 548 103 14,55 ş 136 Other: 8 -Day 2-Day Federal City Project Entity 5/22/2 INDLTHAM ĭ ろアメナナロシ ( enset 70 × 75 Email: info@contestlabs.com 5:31-14 /2.P.A. Date/Time: 5621 21-0, 1 13 ,71 - 01 (11-13) (== 13, 1 · &1 -13) 11-13 Phone: 413-525-2332 11-13 00 Fax: 413-525-6405 Date/Time: < //> 1345 Date/Time: Date/Time: 51.16.5 Jate/Time: Date/Time: なってしまる = BEAVER 5 という 1400001 5-105 1 ٥ りかいりま -200 601 l 247 5/3/k - 26 100 ξ, HERON ૭ ٥ ৩ 867 G Con-Test Quote Name/Number: 4 ∕≻ *8* 69 10 69 CON-test 7 MMK Relinquished by (signature) Relinquished by: (signature) nquished by: (signature) Received by: (signature) 0 くと eived by: (signature) eived by: (signature) Con-Test Work Order nvoice Reciplent: Project Location: Project Manager: Project Number: ampled By: Comments: Address: Phone:

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150 of 153

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	Page Zof Z	# of Containers	<sup>2</sup> Preservation Code	3 Container Code		نڌ	O Lab to Filter	The second of th	O Floid Ellerand			Matrix Codes:	WW = Waste Water	Dw = Drinking Water A = Air	S = Soil SL = Sludge	SOL = Solid O = Other (please	define)	,	Preservation Codes:   = fced	M = Mcthanol	N = Nitric Acid S = Sulfuric Acid	B = Sodium Bisulfate X = Sodium Hydroxide	T = Sodium	0 = Other (please	faillan	<sup>3</sup> Container Codes:	A = Amber Glass G = Glass	P = Plastic	V = Vial	S = Summa Canister T = Tedlar Bag	O = Other (please · define)		PCB ONLY Soxhlet	Non Saxhlet
42017	sa spruce street East Longmeadow, MA 01028				ANALYSIS REQUESTED		£0	0,	ر ا د ا	ران ج الاران ج	) co				XXX	X	<del>`</del>	1						Please use the following codes to indicate possible sample concentration	e column above;	n - rign; M - Medium; L - Low; C - Clean; U - Unknown				ANALYTICAL LABORATORY	Coo Table To	NE ACARAMANAN COCACHEOLOGY	Other  Chromatogram  Altha-LAP 11C	- 1
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I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples



Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client	<u>CDW</u>								
Rece	eived By	لا		Date	5-31-19		Time	181/0	
How were	the samples	In Cooler	£	-			- 1 mie	1842	
	eived?	000.01		No Coole	·	On Ice		No Ice	
		Direct from San	· <del>-</del>		•	Ambient		Melted Ice	
	mples within		By Gun #		_ /	Actual Tem	p-2.8	₹.ঽ	
	ture? 2-6°C	<u> </u>	By Blank #			Actual Tem			-
Wa	as Custody S	eal Intact?	NA		ere Samples	Tampered	with?	NA	•
Was COC Relinquished?				Were Samples Tampered v Does Chain Agree With Sam			mnlee?	NU	
Are th	here broken/l	eaking/loose cap	s on any sam	ples?	F	o Will Out	iibies :		-
is COC in	ink/ Legible?			Were sar	nples receive	ed within he	oldina tima?	_	
	include all	Client		Analysis	T	Sample	er Name		•
	nformation?	Project		ID's		Collection	Dates/Times	<del></del> -	
Are Sample	le labels filled	dout and legible?		•			24(00) 17/11(03)		•
	ab to Filters?	<b>?</b>	F		Who was	notified?			
Are there R			<u>F</u>		Who was				
	hort Holds?	_	F	Who was notified?					
	ough Volume								
is there Hea	adspace whe	re applicable?	NA		MS/MSD?	F			
Proper Med	lia/Container	s Used?			ls splitting sa	amples regi	uired?	F	
	anks receive		E		On COC?	F			
	les have the	proper pH?	MA	Acid	****		Base		
Jals		Containers				<b>#</b>			
Jnp-		1 Liter Amb.		1 Liter I	Plastic		16 oz	Amb	#
ICL-	<u> </u>	500 mL Amb.		500 mL			80z <b>(</b> m)		- 25
Meoh-	24	250 mL Amb.		250 mL			4oz Am		27
Bisulfate- DI-	24	Flashpoint		Col./Ba			2oz Ami		
hiosulfate-		Other Glass		Other F	lastic		Enc		
ulfuric-		SOC Kit		Plastic	Bag	Ī			
		Deschionst					Frozen:		
		Perchlorate	de la Collection de la	Ziplo			-rozen;		
				Ziplo	ck		rozen,		
ials.		ontalners.	# 1		ck		-rozen,		
ials np-		ontalhers 1 Liter Amb.	#2	Ziplo Unused N	ck ledia	#22		Amb	
ials np- CL-	# 1	Sontainers 1 Liter Amb. 500 mL Amb.	#2.2	Ziplo Unused W 1 Liter F	edia		16 oz <i>i</i>		<b>#</b>
ials np- CL- leoh-	# 3	Dontalhers 1 Liter Amb. 500 mL Amb. 250 mL Amb.	#	Ziplo Unused N	edia Plastic Plastic		16 oz / 8oz Amb	/Clear	#.
ials np- CL- eoh- isulfate-	3	ontalines 1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria	#/	Ziplo Unused M 1 Liter F 500 mL	edia Plastic Plastic Plastic		16 oz a 8oz Amb 4oz Amb	o/Clear o/Clear	#
ials np- CL- leoh- sulfate- I-	# 3	ontailners.  1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic	#2	Ziplo Unused M  1 Liter F 500 mL I 250 mL I	edia Plastic Plastic Plastic Olastic oint		16 oz A 8oz Amb 4oz Amb 2oz Amb	o/Clear o/Clear o/Clear	#. #.
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		MADE	EP MCP Analytical	Method Report Cer	tification Form		14510 01 001
La	poratory Name	E1819					
Pro	ject Location:						
This	Form provide	es certifications for	the following data se	et: [list Laboratory Sar	mple ID Number(s)]		
		u 19E1819-15					
Mat	rices:	Soil					
C	AM Protoco	l (check all that	below)				
8260 VOC CAM II A (X)		7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A (X)	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )	
	OSVOC MIB()	7010 Metals CAM III C ()	MassDEP VPH CAM IV C()	8081 Pesticides CAM V B (X)	7196 Hex Cr CAM VI B ()	MassDEP APH CAM IX A ( )	
	Metals III A (X)	6020 Metals CAM III D ( )	MassDEP EPH CAM IV B (X)	8151 Herbicides CAM V C (X)	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ()	
	A	ffirmative response	to Questions A throu	ghF is required for "P	resumptive Certainty"	status	
Α	Were all sample properly presend method holding	☑ Yes	□No¹				
В	Were the analy protocol(s) follo	ected CAM	☑ Yes	□No¹			
С	Were all require protocol(s) imp	☑ Yes					
protocol(s) implemented for all identified performance standard non-conformances?  D Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?							
E a VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).							□No¹
Εb	APH and TO-15		☑ Yes □ Yes				
F	F Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?					☑ Yes	
	A response	to questions G, H a	nd I below is require	d for "Presumptive Ce	rtainty" status		
Were the reporting limits at or below all CAM reporting limits specified in the selected CAM  Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability							☑No¹
and i	epresentativer	ness requirements (	sumptive Certainty" described in 310 CMF	status may not necess R 40. 1056 (2)(k) and W	sarily meet the data us 'SC-07-350.	sability	
Н	Were all QC performance standards specified in the CAM protocol(s) achieved?						☑ <sub>No¹</sub>
Were results reported for the complete analyte list specified in the selected CAM protocol(s)?							□No¹
<sup>1</sup> All I	legative respor	ises must be addres	sed in an attached En	vironmental Laboratory	case narrative.		
l, the thos	undersigned, e responsible i	attest under the pa	ins and penalties of properties of properties of the contraction of the materies of the contraction of the c	perjury that, based up al contained in this an	on my nersonal inqui	ry of ne best	
Sign	ature:	hisa Wo	rthungton	Position:	Technical Represent	ative	
Printed Name: Lisa A. Worthington Date: 06/10/19							

## APPENDIX C



June 14, 2019

Alan Sundquist CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760

Project Location: Beaver St., Waltham, MA

Client Job Number: Project Number: 1830

Laboratory Work Order Number: 19F0402

Michelle Kach

Enclosed are results of analyses for samples received by the laboratory on June 7, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Koch Project Manager

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CDW Consultants, Inc. 6 Huron Drive Natick, MA 01760 ATTN: Alan Sundquist

REPORT DATE: 6/14/2019

PURCHASE ORDER NUMBER:

PROJECT NUMBER:

1830

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER:

19F0402

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Beaver St., Waltham, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
GP-3 MW	19F0402-01	Ground Water		MADEP-EPH-04-1.	1
				MADEP-VPH-Fcb	
				2018 Rev 2.1	
				SW-846 6020B	
				SW-846 7470A	
•				SW-846 8260C	
CD CAMY				SW-846 8270D	
GP-5 MW	19F0402-02	Ground Water		MADEP-EPH-04-1.	1
				MADEP-VPH-Fcb	
,				2018 Rev 2.1	
				SW-846 6020B	
				SW-846 7470A	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8151A	
				SW-846 8260C	
GP-7 MW	19F0402-03	Ground Water		SW-846 8270D	
<del>4.</del> /	171 0402-03	Ground water		MADEP-EPH-04-1.	1
				MADEP-VPH-Feb 2018 Rev 2.1	
				SW-846 6020B	
				SW-846 7470A	
				SW-846 8081B	
				SW-846 8082A	
•				SW-846 8151A	
				SW-846 8260C	
				SW-846 8270D	
MW-2	19F0402-04	Ground Water		MADEP-EPH-04-1.	1
				MADEP-VPH-Feb	•
				2018 Rev 2.1	
				SW-846 6020B	
				SW-846 7470A	
				SW-846 8260C	
				SW-846 8270D	



#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 8270, only a select list of PAHs was analyzed and reported in order to achieve lower detection limits than possible with EPH analysis.

For method 8151 samples were derivatized on 06/12/19.

For method 8151 sample analysis bracketed by LCS to monitor esterification. All recoveries in the bracketing LCS met method criteria.



SW-846 8081R

Qualifications:

P-02

Sample RPD between primary and confirmatory analysis exceeded 40%. Per EPA method 8000, the lower value was reported due to obvious chromatographic interference on the column with the higher result.

Analyte & Samples(s) Qualified:

Heptachlor Epoxide 19F0402-03[GP-7 MW]

SW-846 8260C

Qualifications:

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

compound. Analyte & Samples(s) Qualified:

Acetone

19F0402-01[GP-3 MW], 19F0402-02[GP-5 MW], 19F0402-03[GP-7 MW], 19F0402-04[MW-2], B232980-BLK1, B232980-BS1, B232980-BSD1

RL-07

Elevated reporting limit based on lowest point in calibration.

MA CAM reporting limit not met. Analyte & Samples(s) Qualified:

Carbon Disulfide

19F0402-01[GP-3 MW], 19F0402-02[GP-5 MW], 19F0402-03[GP-7 MW], 19F0402-04[MW-2]

Methylene Chloride

19F0402-01[GP-3 MW], 19F0402-02[GP-5 MW], 19F0402-03[GP-7 MW], 19F0402-04[MW-2]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

.,2-Dichloropropane

19F0402-01[GP-3 MW], 19F0402-02[GP-5 MW], 19F0402-03[GP-7 MW], 19F0402-04[MW-2], B232980-BLK1, B232980-BS1, B232980-BSD1, S037005-CCV1

V-16

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

result. Analyte & Samples(s) Qualified:

1,4-Dioxand

19F0402-01[GP-3 MW], 19F0402-02[GP-5 MW], 19F0402-03[GP-7 MW], 19F0402-04[MW-2], B232980-BLK1, B232980-BS1, B232980-BSD1, S037005-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Chloromethane

B232980-BS1, B232980-BSD1, S037005-CCV1



### MADEP-VPH-Feb 2018 Rev 2.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

Analytical column used for VPH analysis is Restek, Rtx-502.2, 105meter, 0.53mmID, 3um df. Trap used for VPH analysis is Carbopack B/CarboSieveS-III. SW-846 8260C

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acctone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski Laboratory Director



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-3 MW

Sampled: 6/5/2019 09:15

Sample ID: 19F0402-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Acetone	ND	10	μg/L	1	R-05	SW-846 8260C	6/11/19	6/12/19 9:32	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Benzene	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Bromobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Bromochloromethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Bromodichloromethane	ND	1.0	μg/L	ł		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Bromoform	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Bromomethane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
2-Butanone (MEK)	ND	10	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
n-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	
sec-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
tert-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
ert-Butyl Ethyl Ether (TBEE)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Carbon Disulfide	ND	5.0	μg/L	1	RL-07	SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Carbon Tetrachloride	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Chlorobenzene	ND	1.0	μg/L	i		SW-846 8260C	6/11/19		EEH
Chlorodibromomethane	ND	0.50	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 9:32 6/12/19 9:32	EEH
Chloroethane	ND	2.0	μg/L	I		SW-846 8260C	6/11/19		EEH
Chloroform	ND	2.0	μg/L	t		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Chloromethane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
-Chlorotoluene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
-Chlorotoluene	ND	1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
.2-Dibromoethane (EDB)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
ribromomethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
2-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
3-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
4-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
ichlorodifluoromethane (Freon 12)	ND	2.0	μg/L	1		SW-846 8260C		6/12/19 9:32	EEH
1-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
2-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
l-Dichloroethylene	ND	1.0	μg/L	ı			6/11/19	6/12/19 9:32	EEH
s-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
ns-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
2-Dichtoropropane	ND	1.0	μg/L	, 1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
3-Dichloropropane	ND	0.50	րց/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
2-Dichloropropane	ND	1.0			14.0=	SW-846 8260C	6/11/19	6/12/19 9:32	EEH
-Dichloropropene	ND	0.50	μg/L μg/L	1	V-05	SW-846 8260C	6/11/19	6/12/19 9:32	EEH
:-1,3-Dichloropropene	ND	0.40				SW-846 8260C	6/11/19	6/12/19 9:32	EEH
ns-1,3-Dichloropropene	ND	0.40	μg/L ug/I	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
ethyl Ether	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
isopropyl Ether (DIPE)	ND		μg/L	!		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
-Dioxane		0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
nylbenzene	ND	50	μg/L ~	1	V-16	SW-846 8260C	6/11/19	6/12/19 9:32	EEH
•	ND	1.0	μg/L	t		SW-846 8260C	6/11/19	6/12/19 9:32	EEH

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: GP-3 MW Sample ID: 19F0402-01

Samole Matrix: Ground Water

Sampled: 6/5/2019 09:15

Volatile	Organic	Compoun	ds	by G	C/MS

Analyte	Results	RL	Units	Dilution	Fiag/Qual	Method	Date Prepared	Date/Time	4- 1
Hexachlorobutadiene	ND	0.60	μg/L	1	8-4	SW-846 8260C		Analyzed	Analyst
2-Hexanone (MBK)	ND	10	μ <b>g/L</b>	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Isopropylbenzene (Cumene)	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	μg/L	1			6/11/19	6/12/19 9:32	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μ <u>σ</u> /L			SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Methylene Chloride	ND	5.0	μg/L	· i	D1 02	SW-846 8260C	6/11/19	6/12/19 9:32	EEH
4-Mcthyl-2-pentanone (MIBK)	ND	10	μg/L	1	RL-07	SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Naphthalene	ND	2.0				SW-846 8260C	6/11/19	6/12/19 9:32	EEH
n-Propylbenzene	ND	1.0	μg/L ·····″	I		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Styrene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
1,1,2,2-Tetrachloroethane	ND		μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Tetrachloroethylene		0.50	μg/L	I ·		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Tetrahydrofuran	ND	1.0	μg/L	I		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Toluene	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
1,2,4-Trichlorobenzene	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
1,1,1-Trichloroethane	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 9:32	ЕЕН
1,1,2-Trichlorocthane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Trichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
•	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	ЕЕН
1,2,3-Trichloropropane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	ЕЕН
Vinyl Chloride	ND	2.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
m+p Xylene	ND	2.0	<b>μ</b> g∕L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
o-Xylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:32	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual			0/12/17 7/32	EEN
1,2-Dichloroethane-d4		98.6	70-130			·		6/12/19 9:32	<del></del>
Toluene-d8		97.2	70-130					6/12/19 9:32	
4-Bromofluorobenzene		98.5	70-130					6/12/19 9:32	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: GP-3 MW

Sampled: 6/5/2019 09:15

		Semi	ivolatile Organic Co	mpounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzo(a)anthracene (SIM)	ND	1.0	μg/L	1		SW-846 8270D	6/12/19	6/13/19 10:20	CLA
Benzo(a)pyrene (SIM)	ND	0.20	μg/L	1		SW-846 8270D	6/12/19	6/13/19 10:20	CLA
Benzo(b)fluoranthene (SIM)	ND	1.0	μg/L	1		SW-846 8270D	6/12/19	6/13/19 10:20	CLA
Benzo(k)fluoranthene (SIM)	ND	1.0	μg/L	1		SW-846 8270D	6/12/19	6/13/19 10:20	CLA
Chrysene (SIM)	ND	2.0	μg/L	1		SW-846 8270D	6/12/19	6/13/19 10:20	CLA
Dibenz(a,h)anthracene (SIM)	ND	0.50	μg/L	1		SW-846 8270D	6/12/19	6/13/19 10:20	CLA
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.50	μg/L	1		SW-846 8270D	6/12/19	6/13/19 10:20	CLA
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
o-Terphenyl (OTP) (SIM)		78.9	30-130			·		6/13/19 10:20	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: GP-3 MW

Sampled: 6/5/2019 09:15

		Pe	etroleum Hydrocarbe	ons Analyses	- ЕРН				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
C19-C36 Aliphatics	ND	100	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
Unadjusted C11-C22 Aromatics	ND	100	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
C11-C22 Aromatics	ND	100	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	
Acenaphthene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19		KLB
Acenaphthylene	ND	2.0	μg/L	·		MADEP-EPH-04-1.1		6/12/19 18:54	KLB
Anthracene	ND	2.0	μg/L	,		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
Benzo(g,h,i)perylene	ND	2.0	μ <u>σ/L</u>	•			6/11/19	6/12/19 18:54	KLB
Fluoranthene	ND	2.0				MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
Fluorene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
2-Methylnaphthalene			μg/L	1		MADEP-EPII-04-1.1	6/11/19	6/12/19 18:54	KLB
Naphthalene	ND	2.0	μg/L	I		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
•	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
Phenanthrene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
Pyrene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 18:54	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Chlorooctadecane (COD)		61.9	40-140					6/12/19 18:54	
o-Terphenyl (OTP)		75.7	40-140					6/12/19 18:54	
2-Bromonaphthalene		129	40-140					6/12/19 18:54	
2-Fluorobiphenyl		136	40-140					6/12/19 18:54	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-3 MW

Sampled: 6/5/2019 09:15

		Pe	etroleum Hydrocarb	ons Analyses	- VPH			•	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	μg/L	1		MADEP-VPH-Fcb 2018	6/11/19	6/11/19 22:02	KMB
C5-C8 Aliphatics	ND	100	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:02	КМВ
Unadjusted C9-C12 Aliphatics	ND	100	μg/L	ı		Rcv 2.1 MADEP-VPH-Feb 2018			
C9-C12 Aliphatics	ND	100				Rcv 2.1	6/11/19	6/11/19 22:02	KMB
C9-C10 Aromatics			μg/L	I		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 22:02	KMB
	ND	100	μg/L	1		MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:02	КМВ
Benzene	ND	1.0	μg/L	ı		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:02	КМВ
Ethylbenzene	ND	1.0	μg/L	ì		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:02	
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		Rev 2.1			KMB
Naphthalene	ND	5.0				MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 22:02	КМВ
Tolucne			μg/L	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/11/19	6/11/19 22:02	KMB
•	ND	1.0	μg/L	1 ,		MADEP-VPII-Feb 2018 Rev 2.1	6/11/19	6/11/19 22:02	КМВ
m+p Xylene	ND	2.0	μg/L	1		MADEP-VPH-Fcb 2018	6/11/19	6/11/19 22:02	КМВ
o-Xylene	ND	1.0	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:02	КМВ
Surrogates		% Recovery	Recovery Limits		Fing/Qual	Rev 2.1		0/11/19 22:02	- CIMID
2,5-Dibromotoluene (FID)	······································	107	70-130		1.10th Cost				
2,5-Dibromotoluene (PID)		101	70-130 70-130					6/11/19 22:02	
								6/11/19 22:02	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-3 MW

Sampled: 6/5/2019 09:15

				Metals Analys	es (Dissolved)					
Antimony	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
•		ND	1.0	μg/L	1		SW-846 6020B	6/11/19	6/13/19 17:59	МЈН
Arsenic		ND	0.80	μg/L	1		SW-846 6020B	6/11/19	6/13/19 17:59	МЛН
Barium		26	10	μg/L	I		SW-846 6020B	6/11/19	6/13/19 17:59	МЈН
Beryllium		ND	0.40	μg/L	1		SW-846 6020B	6/11/19	6/14/19 8:33	QNW
Cadmium		ND	0.20	μg/L	1		SW-846 6020B	6/11/19	6/13/19 17:59	МЈН
Chromium		7.0	1.0	μg/L	1		SW-846 6020B	6/11/19	6/14/19 8:33	
Lead		3.3	0.50	μg/L	1		SW-846 6020B	6/11/19	6/13/19 17:59	QNW
Mercury		ND	0.00010	mg/L	1 .		SW-846 7470A	6/11/19		МЈН
Nickel		ND	5.0	μg/L	t		SW-846 6020B	6/11/19	6/12/19 12:15	AJL
Sclenium		ND	5.0	μg/L	1				6/13/19 17:59	МЈН
Silver		ND	0.20	μg/L	1		SW-846 6020B	6/11/19	6/13/19 17:59	МЈН
Thallium		ND	0.20	μg/L	1		SW-846 6020B	6/11/19	6/13/19 17:59	МЈН
Vanadium		5.7	5.0		1		SW-846 6020B	6/11/19	6/13/19 17:59	MJH
Zinc		15	10	μg/L "	i		SW-846 6020B	6/11/19	6/14/19 8:33	QNW
			10	μg/L	1		SW-846 6020B	6/11/19	6/13/19 17:59	MJH



Project Location: Beaver St., Waltham, MA

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: GP-5 MW Sample ID: 19F0402-02

Sample Matrix: Ground Water

Sampled: 6/5/2019 10:30

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	μg/L	1	R-05	SW-846 8260C	6/11/19	6/12/19 9:59	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Benzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Bromobenzene	ND	1.0	μg/L	l		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Bromochloromethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Bromodichloromethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Bromoform	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Bromomethane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
2-Butanone (MEK)	ND	10	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
n-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	
sec-Butylbenzene	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
tert-Butylbenzene	ND	1.0	μg/L	j		SW-846 8260C	6/11/19		EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Carbon Disulfide	ND	5.0	μg/L	ı	RL-07	SW-846 8260C		6/12/19 9:59	EEH
Carbon Tetrachloride	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Chlorobenzene	ND	1.0	μg/L	1			6/11/19	6/12/19 9:59	EEH
Chlorodibromomethane	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Chloroethane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Chloroform	ND	2.0	μg/L			SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Chloromethane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
2-Chlorotoluene	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
4-Chlorotoluene	ND	1.0	μg/L			SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	· <del>-</del>			SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1,2-Dibromoethane (EDB)	ND	0.50	μg/L π	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Dibromomethane	ND	1.0	μg/L a	•		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
,2-Dichlorobenzene	ND	1.0	μg/L α	i		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
,3-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
,4-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
,1-Dichloroethane			μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	ЕЕН
,2-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
,1-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
is-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
ans-1,2-Dichloroethylene	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
,2-Dichloropropane	ND	1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
• •	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
3-Dichloropropane	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
2-Dichloropropane	ND	1.0	μg/L	1	V-05	SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
s-1,3-Dichloropropene	ND	0.40	μg/L	I		SW-846 8260C	6/11/19	6/12/19 9:59	ЕЕН
ans-1,3-Dichloropropene	ND	0.40	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
iethyl Ether	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
iisopropyl Ether (DIPE)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
4-Dioxane	ND	50	μg/L	1	V-16	SW-846 8260C	6/11/19	6/12/19 9:59	EEH
llylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	ЕЕН

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-5 MW

Sampled: 6/5/2019 10:30

		v	olatile Organic Com	pounds by G	C/MS	•			
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.60	μg/L	1	·	SW-846 8260C	6/11/19	6/12/19 9:59	EEH
2-Hexanone (MBK)	ND	10	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Isopropylbenzene (Cumene)	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	μg/L	į		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Methylene Chloride	ND	5.0	μg/L	1	RL-07	SW-846 8260C	6/11/19	6/12/19 9:59	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Naphthalene	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	
n-Propylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Styrene	ND	1.0	. υ μg/L	1		SW-846 8260C	6/11/19		EEH
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	րց/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Tetrachloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Tetrahydrofuran	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Toluene	ND	1.0	μg/L	ı		SW-846 8260C		6/12/19 9:59	EEH
1,2,3-Trichlorobenzene	ND	2.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19 6/11/19	6/12/19 9:59	EEH
1,1,1-Trichloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1,1,2-Trichloroethane	ND	1.0	μg/L	1		SW-846 8260C SW-846 8260C		6/12/19 9:59	EEH
Trichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	μg/L			SW-846 8260C SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1,2,3-Trichloropropane	ND	2.0	μg/L	1			6/11/19	6/12/19 9:59	EEH
1,2,4-Trimethylbenzene	ND	1.0	μg/L μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1,3,5-Trimethylbenzene	ND	1.0	μg/L μg/L	· I		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Vinyl Chloride	ND	2.0	μg/L μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
m+p Xylene	ND	2.0	μg/L μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
o-Xylene	ND	1.0	μg/L μg/L	1		SW-846 8260C	6/11/19	6/12/19 9:59	EEH
Surrogates		% Recovery		•	TI 10 1	SW-846 8260C	6/11/19	6/12/19 9:59	EEH
1,2-Dichloroethane-d4	<del></del>	100	Recovery Limits 70-130		Flag/Qual			41.51.5	
Toluene-d8		97.2	70-130 70-130					6/12/19 9:59 6/12/19 9:59	
4-Bromofluorobenzene		96.8	70-130					6/12/19 9:59 6/12/19 9:59	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-5 MW

Sampled: 6/5/2019 10:30

Semivolatile Organic Compounds by GC/MS											
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst		
Benzo(a)anthracene (SIM)	ND	1.0	μg/L	i		SW-846 8270D	6/12/19	6/13/19 15:36	CLA		
Benzo(a)pyrene (SIM)	ND	0.20	μg/L	1		SW-846 8270D	6/12/19	6/13/19 15:36	CLA		
Benzo(b)fluoranthene (SIM)	ND	1.0	μg/L	1		SW-846 8270D	6/12/19	6/13/19 15:36	CLA		
Benzo(k)fluoranthene (SIM)	ND	1.0	μg/L	l		SW-846 8270D	6/12/19	6/13/19 15:36	CLA		
Chrysene (SIM)	ND	2.0	μg/L	1		SW-846 8270D	6/12/19	6/13/19 15:36			
Dibenz(a,h)anthracene (SIM)	ND	0.50	μg/L	ı		SW-846 8270D	6/12/19	6/13/19 15:36	CLA CLA		
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.50	μg/L	1		SW-846 8270D	6/12/19	6/13/19 15:36	CLA		
Surrogates		% Recovery	Recovery Limits		Flag/Qual						
o-Terphenyl (OTP) (SIM)		61.4	30-130		g (			6/13/19 15:36			

Work Order: 19F0402



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Date Received: 6/7/2019
Field Sample #: GP-5 MW

Sampled: 6/5/2019 10:30

			Organochloride Pest	icides by GC	/ECD				<del></del>
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	0.053	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
alpha-BHC[1]	ND	0.053	μg/L	I		SW-846 8081B	6/9/19	6/11/19 21:29	TG
beta-BHC [1]	ND	0.053	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
delta-BHC [1]	ND	0.053	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	
gamma-BHC (Lindane) [1]	ND	0.032	μg/L	1		SW-846 8081B	6/9/19		TG
Chlordane [1]	ND	0.21	μg/L	1		SW-846 8081B		6/11/19 21:29	TG
4,4'-DDD [1]	ND	0.042	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
4,4'-DDE [1]	ND	0.042	րը/ <b>L</b>	1			6/9/19	6/11/19 21:29	TG
4,4'-DDT [1]	ND	0.042	μg/L	•		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Dieldrin [1]	ND	0.0021		,		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Endosulfan I [1]	ND	0.053	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Endosulfan II [1]	ND	0.084	μg/L ~			SW-846 8081B	6/9/19	6/11/19 21:29	TG
Endosulfan sulfate [1]			μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Endrin [1]	ND	0.084	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Endrin ketone [1]	ND	0.084	μg/L	i		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Heptachlor [1]	ND	0.084	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
· • •	ND	0.053	μg/L	ı		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Heptachlor epoxide [1]	ND	0.053	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Hexachlorobenzene [1]	ND	0.053	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Methoxychlor [1]	ND	0.53	μg/L	I		SW-846 8081B	6/9/19	6/11/19 21:29	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		75.5	30-150					6/11/19 21:29	
Decachlorobiphenyl [2]		74.2	30-150					6/11/19 21:29	
Tetrachloro-m-xylene [1] Tetrachloro-m-xylene [2]		90.6	30-150					6/11/19 21:29	
redaemoro-m-xyrene [2]		93.5	30-150					6/11/19 21:29	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-5 MW

Sampled: 6/5/2019 10:30

Sample ID: 19F0402-02

Sample Matrix: Ground Water

		P	olychlorinated Biph	enyls By GC	ÆCD				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.21	μg/L	1		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Aroclor-1221 [1]	ND	0.21	μg/L	1		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Aroclor-1232 [1]	ND	0.21	μg/L	1		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Aroclor-1242 [1]	ND	0.21	μg/L	1		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Aroclor-1248 [1]	ND	0.21	μg/L	1		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Aroclor-1254 [1]	ND	0.21	μg/L	ı		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Aroclor-1260 [1]	ND	0.21	μg/L	1		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Aroclor-1262 [1]	ND	0.21	μg/L	ı		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Aroclor-1268 [1]	ND	0.21	μg/L	1		SW-846 8082A	6/9/19	6/11/19 17:01	PJG
Surrogates		% Recovery	Recovery Limits		Flag/Qual			0.11.13 17.01	
Decachlorobiphenyl [1]		73.9	30-150					6/11/19 17:01	
Decachlorobiphenyl [2]		71.7	30-150					6/11/19 17:01	
Tetrachloro-m-xylene [1]		83.8	30-150		,			6/11/19 17:01	
Tetrachloro-m-xylene [2]		78.1	30-150			·		6/11/19 17:01	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-5 MW

Sampled: 6/5/2019 10:30

			Herbicides by	GC/ECD					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	0.51	μg/L	ì		SW-846 8151A	6/10/19	6/13/19 21:43	TG
2,4-DB [1]	ND	0.51	μg/L	1		SW-846 8151A	6/10/19	6/13/19 21:43	TG
2,4,5-TP (Silvex) [1]	ND	0.051	μg/L	ı		SW-846 8151A	6/10/19	6/13/19 21:43	TG
2,4,5-T [1]	ND	0.10	μg/L	1		SW-846 8151A	6/10/19	6/13/19 21:43	TG
Dalalpon [1]	ND	1.3	μg/L	ı		SW-846 8151A	6/10/19	6/13/19 21:43	TG
Dicamba [1]	ND	0.051	μg/L	1		SW-846 8151A	6/10/19	6/13/19 21:43	TG
Dichloroprop [1]	ND	0.51	μg/L	1		SW-846 8151A	6/10/19	6/13/19 21:43	TG
Dinoseb [1]	ND	0.26	μg/L	1		SW-846 8151A	6/10/19	6/13/19 21:43	TG
MCPA[1]	ND	51	μg/L	1		SW-846 8151A	6/10/19	6/13/19 21:43	TG
MCPP [1]	ND	51	μg/L	1		SW-846 8151A	6/10/19	6/13/19 21:43	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual	·····			
2,4-Dichlorophenylacetic acid [1]		94.8	30-150		i			6/13/19 21:43	
2,4-Dichlorophenylacetic acid [2]		88.5	30-150					6/13/19 21:43	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: GP-5 MW

Sampled: 6/5/2019 10:30

Petroleum Hydrocarbons Analyses - EPH											
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst		
C9-C18 Aliphatics	ND	100	μg/L	1		MADEP-EPH-04-1,1	6/11/19	6/12/19 19:13	KLB		
C19-C36 Aliphatics	ND	100	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
Unadjusted C11-C22 Aromatics	ND	100	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13			
C11-C22 Aromatics	ND	100	μg/L	1		MADEP-EPH-04-1.1	6/11/19		KLB		
Acenaphthene	ND	2.0	re- μg/L	1		MADEP-EPH-04-1.1		6/12/19 19:13	KLB		
Acenaphthylene	ND	2.0	μg/L	•		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
Anthracene	ND	2.0	μg/L	,			6/11/19	6/12/19 19:13	KLB		
Benzo(g,h,i)perylene	ND	2.0				MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
Fluoranthene	ND	2.0	μg/L			MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
Fluorene	ND		μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
2-Methylnaphthalene		2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
Naphthalene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
•	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
Phenanthrene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
Pyrene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:13	KLB		
Surrogates		% Recovery	Recovery Limits		Flag/Qual			~			
Chlorooctadecane (COD)		60.1	40-140					6/12/19 19:13			
o-Terphenyl (OTP)		67.5	40-140					6/12/19 19:13			
2-Bromonaphthalene		125	40-140					6/12/19 19:13			
2-Fluorobiphenyl		135	40-140					6/12/19 19:13			



Project Location: Beaver St., Waltham, MA

Sample Description:

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Work Order: 19F0402

6/11/19 22:31

Date Received: 6/7/2019 Field Sample #: GP-5 MW

Sampled: 6/5/2019 10:30

Sample ID: 19F0402-02 Sample Matrix: Ground Water

2,5-Dibromotoluene (PID)

		Po	troleum Hydrocarb	ons Analyses	- VPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Unadjusted C5-C8 Aliphatics	ND	100	μg/L	I		MADEP-VPH-Fcb 2018	6/11/19	6/11/19 22:31	KMB
C5-C8 Aliphatics	ND	100	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:31	KMB
Unadjusted C9-C12 Aliphatics	ND	100	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 22:31	КМВ
C9-C12 Aliphatics C9-C10 Aromatics	ND	100	μg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 22:31	КМВ
	ND	100	μg/L	1		MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:31	КМВ
Benzene	ND	1.0	μg/L	I		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:31	КМВ
Ethylbenzene	ND	1.0	μg/L	ì		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:31	КМВ
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 22:31	КМВ
Naphthalene	ND	5.0	μg/L	1		Rev 2.1 MADEP-VPII-Feb 2018	6/11/19	6/11/19 22:31	КМВ
Toluene	ND	1.0	μg/L	t		Rev 2.1 MADEP-VPII-Fcb 2018	6/11/19	6/11/19 22:31	КМВ
n+p Xylene	ND	2.0	μg/L	1		Rev 2.1 MADEP-VPH-Fcb 2018	6/11/19	6/11/19 22:31	КМВ
-Xylene	ND	1.0	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 22:31	КМВ
Surrogates		% Recovery	Recovery Limits		Flag/Qual	1007 2.1			
2,5-Dibromotoluene (FID) 2,5-Dibromotoluene (PID)		115	70-130					6/11/19 22:31	

70-130



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-5 MW

Sampled: 6/5/2019 10:30

Metals Analyses (Dissolved)											
4	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst	
Antimony		ND	1.0	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:06	МЈН	
Arsenic		ND	0.80	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:06		
Barium Beryllium		42	10	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:06	МЛН МЈН	
-		ND	0.40	μg/L	1		SW-846 6020B	6/11/19	6/14/19 8:38	QNW	
Cadmium		ND	0.20	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:06	МЈН	
Chromium		4.0	1.0	μg/L	1		SW-846 6020B	6/11/19	6/14/19 8:38	QNW	
Lcad		1.9	0.50	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:06	-	
Mercury		ND	0.00010	mg/L	1		SW-846 7470A	6/11/19		НІМ	
Nickel		ND	5.0	μg/L	1		SW-846 6020B		6/12/19 12:21	AJL	
Selenium		ND	5.0	μg/L	1			6/11/19	6/13/19 18:06	МЈН	
Silver		ND	0.20				SW-846 6020B	6/11/19	6/13/19 18:06	MJH	
Thallium		ND	0.20	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:06	МЈН	
Vanadium				μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:06	МЈН	
Zinc		ND	5.0	μg/L	1		SW-846 6020B	6/11/19	6/14/19 8:38	QNW	
Zaic		ND	10	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:06	мјн	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

Sample Matrix: Ground Water

			Volatile Organic Co	mpounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Accione	ND	10	μg/L	ı	R-05	SW-846 8260C	6/11/19	6/12/19 10:25	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Benzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Bromobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Bromochloromethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Bromodichloromethane	ND	1.0	μg/L	1		SW-846 \$260C	6/11/19	6/12/19 10:25	EEH
Bromoform	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Bromomethane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
2-Butanone (MEK)	ND	10	μg/L	t		SW-846 8260C	6/11/19	6/12/19 10:25	ЕЕН
n-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
ec-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
ert-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
ert-Butyl Ethyl Ether (TBEE)	ND	0.50	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Carbon Disulfide	ND	5.0	μg/L	1	RL-07	SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Carbon Tetrachloride	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Chlorobenzene	11	1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Chlorodibromomethane	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Chloroethane	ND	2.0	μ <b>g/</b> L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Chloroform	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Chloromethane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
-Chlorotoluene	ND	1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
-Chlorotoluene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
2-Dibromo-3-chloropropane (DBCP)	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
2-Dibromoethane (EDB)	ND	0.50	μg/L	ī		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
ibromomethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
2-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
3-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
4-Dichlorobenzene	5.4	1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
ichlorodifluoromethane (Freon 12)	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
1-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
2-Dichloroethane	1.7	1.0	μg/L	ī		SW-846 8260C	6/11/19	6/12/19 10:25	ЕЕН
I-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
s-1,2-Dichloroethylene	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
ins-1,2-Dichloroethylene	ND	1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
2-Dichloropropane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	
3-Dichloropropane	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
2-Dichloropropane	ND	1.0	μg/L	1	V-05	SW-846 8260C	6/11/19	6/12/19 10:25	EEH
I-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
:-1,3-Dichloropropene	ND	0.40	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
ns-1,3-Dichloropropene	ND	0.40	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
ethyl Ether	ND	2.0	μg/L	1		SW-846 8260C	6/11/19		EEH
isopropyl Ether (DIPE)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
I-Dioxane	ND	50	μg/L	1	V-16	SW-846 8260C	6/11/19	6/12/19 10:25	EEH
aylbenzene	ND	1.0	μg/L	1	<b>-</b>	SW-846 8260C	6/11/19	6/12/19 10:25 6/12/19 10:25	EEH

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Work Order: 19F0402



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Date Received: 6/7/2019
Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

		7	Volatile Organic Com	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	El/O		Date	Date/Time	
Hexachlorobutadiene	ND	0.60	μg/L	1	Flag/Qual	Method	Prepared	Analyzed	Analyst
2-Hexanone (MBK)	ND	10	μg/L	•		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Isopropylbenzene (Cumene)	ND	1.0		1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	μg/L π	i .		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Methylene Chloride	ND	5.0	μg/L "	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	μg/L ~	l	RL-07	SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Naphthalene	ND		μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
n-Propylbenzene	ND ND	2.0	μg/ <b>L</b>	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Styrene		1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Tetrachloroethylene	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Tetrahydrofuran	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Toluene	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
1,2,3-Trichlorobenzene	ND	1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
1,2,4-Trichlorobenzene	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
1,1,1-Trichloroethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
1,1,2-Trichloroethane	ND	1.0	μg/L	I		SW-846 8260C	6/11/19	6/12/19 10:25	ЕЕН
Trichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	ЕЕН
1,2,3-Trichloropropane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	ЕЕН
1,2,4-Trimethylbenzene	ND	1.0	μ <b>g/L</b>	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	ЕЕН
Vinyl Chloride	ND	2.0	μg/L	ì		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
m+p Xylene	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
o-Xylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:25	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual	<del></del>			
1,2-Dichloroethane-d4		99.3	70-130					6/12/19 10:25	
Toluene-d8		98.5	70-130					6/12/19 10:25	
4-Bromofluorobenzene		99.3	70-130					6/12/19 10:25	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

		Sem	ivolatile Organic Co	mpounds by	GC/MS			······································	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzo(a)anthracene (SIM)	ND	0.95	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:05	CLA
Benzo(a)pyrene (SIM)	ND	0.19	μg/L	t		SW-846 8270D	6/12/19	6/13/19 16:05	CLA
Benzo(b)fluoranthene (SIM)	ND	0.95	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:05	CLA
Benzo(k)fluoranthene (SIM)	ND	0.95	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:05	CLA
Chrysene (SIM)	ND	1.9	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:05	CLA
Dibenz(a,h)anthracene (SIM)	ND	0.48	μg/L	i		SW-846 8270D	6/12/19	6/13/19 16:05	CLA
Indeno(1,2,3-ed)pyrene (SIM)	ND	0.48	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:05	CLA
Surrogates		% Recovery	Recovery Limits	***************************************	Flag/Qual				
o-Terphenyl (OTP) (SIM)		56.3	30-130					6/13/19 16:05	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

		O	rganochloride Pesti	cides by GC	ECD/ECD				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	0.057	μg/L	l		SW-846 8081B	6/9/19	6/11/19 21:56	TG
alpha-BHC [1]	5.2	0.57	μg/L	10		SW-846 8081B	6/9/19	6/12/19 10:16	TG
beta-BHC [1]	2.0	0.057	μg/L	ı		SW-846 8081B	6/9/19	6/11/19 21:56	TG
delta-BHC [2]	14	0.57	μg/L	10		SW-846 8081B	6/9/19	6/12/19 10:16	TG
gamma-BHC (Lindone) [1]	0.36	0.034	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Chlordane [2]	3,2	0.23	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
4,4'-DDD [1]	ND	0.046	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
4,4'-DDE [1]	ND	0.046	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
4,4'-DDT [2]	0.057	0.046	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Dieldrin [2]	0.19	0.0023	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Endosulfan I [1]	ND	0.057	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Endosulfan II [1]	ND	0.092	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Endosulfan sulfate [1]	ND	0.092	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Endrin [1]	ND	0.092	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Endrin ketone [1]	ND	0.092	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Heptachlor [1]	ND	0.057	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Heptachlor epoxide [1]	0.15	0.057	μg/L	1	P-02	SW-846 8081B	6/9/19	6/11/19 21:56	TG
Hexachlorobenzene [1]	ND	0.057	μg/L	t		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Methoxychlor [1]	ND	0.57	μg/L	1		SW-846 8081B	6/9/19	6/11/19 21:56	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual		· · · · · · · · · · · · · · · · · · ·		
Decachlorobiphenyl [1]		89.7	30-150					6/11/19 21:56	
Decachlorobiphenyl [2]		89.1	30-150					6/11/19 21:56	
Tetrachloro-m-xylene [1]		93.8	30-150					6/11/19 21:56	
Tetrachioro-m-xylene [2]		94.0	30-150					6/11/19 21:56	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

		P	olychlorinated Biph	enyls By GC	ÆCD				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.23	μg/L	1		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Aroclor-1221 [1]	ND	0.23	μg/L	1		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Aroclor-1232 [1]	ND	0.23	μg/L	1		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Aroclor-1242 [1]	ND	0.23	μg/L	1		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Aroclor-1248 [1]	ND	0.23	μg/L	1		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Aroclor-1254 [1]	ND	0.23	μg/L	ī		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Aroclor-1260 [1]	ND	0.23	μg/L	1		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Aroclor-1262 [1]	ND	0.23	μg/L	1		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Aroclor-1268 [1]	ND	0.23	μg/L	ì		SW-846 8082A	6/9/19	6/12/19 10:17	PJG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		84.1	30-150					6/12/19 10:17	
Decachlorobiphenyl [2]		76.3	30-150					6/12/19 10:17	
Tetrachloro-m-xylene [1]		75.8	30-150					6/12/19 10:17	
Tetrachloro-m-xylene [2]		70.0	30-150					6/12/19 10:17	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

			Herbicides by	GC/ECD			•		
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	0.50	μg/L	I		SW-846 8151A	6/10/19	6/13/19 22:22	TG
2,4-DB [1]	ND	0.50	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
2,4,5-TP (Silvex) [1]	ND	0.050	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
2,4,5-T [1]	ND	0.10	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
Dalalpon [1]	ND	1.2	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
Dicamba [1]	ND	0.050	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
Dichloroprop [1]	ND	0.50	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
Dinoseb [1]	ND	0.25	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
MCPA [1]	ND	50	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
MCPP [1]	ND	50	μg/L	1		SW-846 8151A	6/10/19	6/13/19 22:22	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		81.7	30-150					6/13/19 22:22	
2,4-Dichlorophenylacetic acid [2]		85.5	30-150					6/13/19 22:22	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

		Po							
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	95	μg/L	i		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
C19-C36 Aliphatics	ND	95	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	
Unadjusted C11-C22 Aromatics	ND	95	μg/L	1		MADEP-EPH-04-1.1			KLB
C11-C22 Aromatics	ND	95	μ <b>g/L</b>	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
Acenaphthene	ND	1.9	. –	•			6/11/19	6/12/19 19:32	KLB
Accnaphthylene	ND	1.9	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
Anthracene			μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
Benzo(g,h,i)perylene	ND	1.9	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
	ND	1.9	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
Fluoranthene	ND	1.9	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
Fluorene	ND	1.9	μg/L	ı		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
2-Methylnaphthalene	ND	1.9	μg/L	1		MADEP-EPH-04-1.1	6/11/19		
Naphthalene	ND	1.9	μg/L	1		MADEP-EPH-04-1.1		6/12/19 19:32	KLB
Phenanthrene	ND	1.9		,			6/11/19	6/12/19 19:32	KLB
Ругене	ND	1.9	μg/L			MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
Suggestion	ND		μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:32	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Chlorooctadecane (COD) o-Terphenyl (OTP)		60.2	40-140					6/12/19 19:32	<del></del>
2-Bromonaphthalene		63.5	40-140					6/12/19 19:32	
2-Fluorobiphenyl		86.1	40-140					6/12/19 19:32	
· - · - · · · · · · · · · · · · · ·		92.4	40-140					6/12/19 19:32	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

Sample ID: 19F0402-03 Sample Matrix: Ground Water

		Pe	troleum Hydrocarb	ons Analyses	- VPH	, , , , , , , , , , , , , , , , , , , ,			
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Unadjusted C5-C8 Aliphatics	ND	100	μg/L	1		MADEP-VPH-Feb 2018	6/11/19	6/11/19 23:01	KMB
C5-C8 Aliphatics	ND	100	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19	6/11/19 23:01	KMB
Unadjusted C9-C12 Aliphatics	ND	100	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:01	КМВ
C9-C12 Aliphatics C9-C10 Aromatics	ND	100	μg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:01	KMB
Benzene	ND	100	μg/L	I		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:01	КМВ
Ethylbenzene	ND ND	1.0 1.0	μg/L	I		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:01	КМВ
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:01	KMB
Naphthalene	ND	5.0	μg/L μg/L	1		MADEP-VPII-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:01	KMB
Toluene	ND	1.0	μg/L	1		MADEP-VPH-Fcb 2018 Rev 2.1 MADEP-VPH-Fcb 2018	6/11/19	6/11/19 23:01	КМВ
m+p Xylene	ND	2.0	μg/L	1		Rev 2.1 MADEP-VPH-Feb 2018	6/11/19 6/11/19	6/11/19 23:01	KMB
o-Xylene	ND	1.0	μg/L	1		Rev 2.1 MADEP-VPH-Fcb 2018	6/11/19	6/11/19 23:01 6/11/19 23:01	KMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual	Rev 2.1			
2,5-Dibromotoluene (FID)	· · · · · · · · · · · · · · · · · · ·	102	70-130		* mg/Quai			(//////////////////////////////////////	
2,5-Dibromotoluene (PID)		101	70-130					6/11/19 23:01 6/11/19 23:01	

6/11/19 23:01



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: GP-7 MW

Sampled: 6/5/2019 12:05

				Metals Analys						
A : A !	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony		ND	1.0	μg/L	l		SW-846 6020B	6/11/19	6/13/19 18:10	МЈН
Arsenic		12	0.80	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:10	МЈН
Barium		20	10	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:10	МЈН
Beryllium		ND	0.40	μg/L	1		SW-846 6020B	6/11/19	6/14/19 8:41	QNW
Cadmium		ND	0.20	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:10	МЈН
Chromium		4.7	1.0	μg/L	ι		SW-846 6020B	6/11/19	6/14/19 8:41	QNW
Lead		3.2	0.50	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:10	мјн
Mercury		ND	0.00010	mg/L	1		SW-846 7470A	6/11/19	6/12/19 12:23	AJL
Nickel		ND	5.0	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:10	МЈН
Selenium		ND	5.0	μg/L	l		SW-846 6020B	6/11/19	6/13/19 18:10	МЈН
Silver		ND	0.20	μg/L	ı		SW-846 6020B	6/11/19	6/13/19 18:10	НІМ
Thallium		ND	0.20	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:10	MJH
Vanadium		ND	5.0	μg/L	. 1		SW-846 6020B	6/11/19	6/14/19 8:41	
Zinc		12	10	μg/L	1		SW-846 6020B	6/11/19		QNW
					-		5 5 0020B	W 11/17	6/13/19 18:10	МЈН

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: MW-2 Sample ID: 19F0402-04

Sampled: 6/5/2019 13:30

		•	Volatile Organic Co	mpounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analy
Acetone	ND	10	μ <b>g/L</b>	l	R-05	SW-846 8260C	6/11/19	6/12/19 10:52	Analys EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Benzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Bromobenzene	ND	1.0	μg/L	I		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Bromochloromethane	ND	1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Bromodichloromethane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Bromoform	ND	1.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Bromomethane	ND	2.0	μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:52	
2-Butanone (MEK)	ND	10	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
n-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19		EEH
sec-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
tert-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	μg/L	1		SW-846 8260C		6/12/19 10:52	EEH
Carbon Disulfide	ND	5.0	μg/L	1	RL-07	SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Carbon Tetrachloride	ND	1.0	μg/L	1	ACC-07	SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Chlorobenzene	ND	1.0	μg/L	1			6/11/19	6/12/19 10:52	EEH
Chlorodibromomethane	ND	0.50	μg/L	ı		SW-846 8260C SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Chlorocthane	ND	2.0	μg/L	1			6/11/19	6/12/19 10:52	EEH
Chloroform	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Chloromethane	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
-Chlorotoluene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
-Chlorotoluene	ND	1.0	μg/L			SW-846 8260C	6/11/19	6/12/19 10:52	EEH
,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
,2-Dibromoethane (EDB)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
Pibromomethane	ND	1.0	-	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
2-Dichlorobenzene	ND	1.0	μg/L σπ	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
3-Dichlorobenzene	ND	1.0	μg/L π	-		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
4-Dichlorobenzene	ND	1.0	μg/L σ	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
ichlorodifluoromethane (Freon 12)	ND	2.0	μg/L 	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
1-Dichloroethane	ND		µg/L .a.	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
2-Dichloroethane	ND	1.0	μg/L	I .		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
1-Dichloroethylene		1.0	μg/L	i		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
s-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
ns-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
2-Dichloropropane	ND	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
3-Dichloropropane	ND	1.0	μg/L	ī		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
2-Dichloropropane	ND	1.0	μg/L	1	V-05	SW-846 8260C	6/11/19	6/12/19 10:52	EEH
I-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
:-1,3-Dichloropropene	ND	0.40	μg/L	l		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
ins-1,3-Dichloropropene	ND	0.40	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
ethyl Ether	ND	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
isopropyl Ether (DIPE)	ND	0.50	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
1-Dioxane	ND	50	μg/L	1	V-16	SW-846 8260C	6/11/19	6/12/19 10:52	EEH
hylbenzene	2.4	1.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019
Field Sample #: MW-2

Sampled: 6/5/2019 13:30

	1	Volatile Organic Com	pounds by C	C/MS				
Results	RL	Units	Dilution	Flag/Qual	Maskad	Date	Date/Time	
ND	0.60			v.infl./Cngt				Anai
ND	10							EE
ND								EE
ND							6/12/19 10:52	EEI
		· -					6/12/19 10:52	EEI
				71.07			6/12/19 10:52	EER
		· -		KL-07		6/11/19	6/12/19 10:52	EE
						6/11/19	6/12/19 10:52	EEF
						6/11/19	6/12/19 10:52	EEH
					SW-846 8260C	6/11/19	6/12/19 10:52	EEF
					SW-846 8260C	6/11/19	6/12/19 10:52	EEH
					SW-846 8260C	6/11/19	6/12/19 10:52	EEF
					SW-846 8260C	6/11/19	6/12/19 10:52	EEF
					SW-846 8260C	6/11/19	6/12/19 10:52	EEF
					SW-846 8260C	6/11/19	6/12/19 10:52	EEH
		· <del>-</del>			SW-846 8260C	6/11/19	6/12/19 10:52	EEH
			1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
· · ·			I		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
			1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
			t		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
			i		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
		μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
		μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	ЕЕН
		μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
		μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
		μg/L	ı		SW-846 8260C	6/11/19	6/12/19 10:52	EEH
	2.0	μg/L	1		SW-846 8260C	6/11/19	6/12/19 10:52	ЕЕН
ND	1.0	μg/L	I		SW-846 8260C	6/11/19	6/12/19 10:52	ЕЕН
	% Recovery	Recovery Limits		Flag/Qual			***************************************	
	98.0	70-130					6/12/19 10:52	
	98.0 97.6	70-130 70-130					6/12/19 10:52	
	ND ND ND ND ND ND ND ND ND ND ND ND ND N	Results   RL   ND   0.60   ND   1.0   ND   2.0   ND   1.0   ND   2.0   ND   1.0   ND   2.0   ND   1.0   ND   2.0   ND   38.0   98.0	Results   RL   Units	Results   RL   Units   Dilution	ND 0.60	Results   RL   Units   Dilution   Flag/Qual   Method	Results   RL   Units   Dilution   Flag/Qual   Method   Prepared	Results   RL   Units   Dilution   Fing/Qual   Method   Prepared   Analyzed



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019

Field Sample #: MW-2 Sample ID: 19F0402-04

Sampled: 6/5/2019 13:30

Sample Matrix: Ground Water

		Semi	volatile Organic Co	mpounds by	GC/MS		****		
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzo(a)anthracene (SIM)	ND	0.99	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:34	CLA
Benzo(a)pyrene (SIM)	ND	0.20	μg/L	I		SW-846 8270D	6/12/19	6/13/19 16:34	CLA
Benzo(b)fluoranthene (SIM)	ND	0.99	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:34	CLA
Benzo(k)fluoranthene (SIM)	ND	0.99	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:34	CLA
Chrysene (SIM)	ND	2.0	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:34	CLA
Dibenz(a,h)anthracene (SIM)	ND	0.49	μg/L	ı		SW-846 8270D	6/12/19	6/13/19 16:34	CLA
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.49	μg/L	1		SW-846 8270D	6/12/19	6/13/19 16:34	CLA
Surrogates		% Recovery	Recovery Limits	# · · · · · · · · · · · · · · · · · · ·	Flag/Qual				
o-Terphenyl (OTP) (SIM)		62.7	30-130				······································	6/13/19 16:34	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: MW-2

Sampled: 6/5/2019 13:30

		Pe	troleum Hydrocarb	ons Analyses	- EPH		· · · · · · · · · · · · · · · · · · ·		
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	150	99	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
C19-C36 Aliphatics	ND	99	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
Unadjusted C11-C22 Aromatics	ND	99	μg/L	ı		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	
C11-C22 Aromatics	ND	99	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
Acenaphthene	ND	2.0	μg/L	i		MADEP-EPH-04-1.1	6/11/19		KLB
Acenaphthylene	ND	2.0	μg/L	i		MADEP-EPH-04-1.1		6/12/19 19:51	KLB
Anthracene	ND	2.0	μg/L	,			6/11/19	6/12/19 19:51	KLB
Benzo(g,h,i)perylene	ND	2.0				MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
Fluoranthene	ND	2.0	μg/L			MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
Fluorene	ND		μg/L 	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
2-Methylnaphthalene		2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
Naphthalene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
•	ND	2.0	μg/L	i		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
Phenanthrene	ND.	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
Pyrene	ND	2.0	μg/L	1		MADEP-EPH-04-1.1	6/11/19	6/12/19 19:51	KLB
Surrogates		% Recovery	Recovery Limits	***************************************	Flag/Qual				
Chlorooctadecane (COD)		62.4	40-140					6/12/19 19:51	
o-Terphenyl (OTP)		65.7	40-140					6/12/19 19:51	
2-Bromonaphthalene		83.6	40-140					6/12/19 19:51	
2-Fluorobiphenyl		91.1	40-140			•		6/12/19 19:51	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: MW-2

Sampled: 6/5/2019 13:30

		Pe	troleum Hydrocarb	ons Analyses	- VPH				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
Unadjusted C5-C8 Aliphatics	ND	100	μg/L	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
C5-C8 Aliphatics	ND	100	μg/L	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
Unadjusted C9-C12 Aliphatics	ND	100	μg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
C9-C12 Aliphatics	ND	100	μg/L	t		MADEP-VPH-Fcb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
C9-C10 Aromatics	ND	100	μg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
Benzene	ND	1.0	μg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
Ethylbenzene	2.2	1.0	μg/L	i		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
Naphthalene	ND	5.0	μg/L	1		MADEP-VPII-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
Toluene	ND	. 1.0	μg/L	1		MADEP-VPH-Fcb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
m+p Xylene	ND	2.0	μg/L	1		MADEP-VPH-Feb 2018 Rev 2.1	6/11/19	6/11/19 23:30	КМВ
o-Xylene	ND	1.0	μg/L	i		MADEP-VPH-Fcb 2018 Rev 2.1	6/11/19	6/11/19 23:30	KMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual	1107 2.1			
2,5-Dibromotoluene (FID)		96.4	70-130					6/11/19 23:30	
2,5-Dibromotoluene (PID)		95,9	70-130					6/11/19 23:30	



Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19F0402

Date Received: 6/7/2019 Field Sample #: MW-2

Sampled: 6/5/2019 13:30

Sample ID: 19F0402-04

Sample Matrix: Ground Water

				Metals Analys	ses (Dissolved)					
Antimony	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic		ND	1.0	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:13	МЈН
Barium		ND	0.80	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:13	МЈН
		33	10	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:13	МЈН
Beryllium		ND	0.40	μg/L	l		SW-846 6020B	6/11/19	6/14/19 8:44	QNW
Cadmium		ND	0.20	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:13	МЈН
Chromium		1.1	1.0	μg/L	ı		SW-846 6020B	6/11/19	6/14/19 8:44	ONW
Lead		ND	0.50	μg/L	I		SW-846 6020B	6/11/19	6/13/19 18:13	МЈН
Mercury		ND	0.00010	mg/L	1		SW-846 7470A	6/11/19	6/12/19 12:24	
Nickel		ND	5.0	μg/L	1		SW-846 6020B	6/11/19		AJL
Sclenium		ND	5.0	μg/L	1		SW-846 6020B	6/11/19	6/13/19 18:13	МЈН
Silver		ND	0.20	μg/L	1		SW-846 6020B		6/13/19 18:13	MJH
Thallium		ND	0.20	μg/L	- I			6/11/19	6/13/19 18:13	HLW
Vanadium		ND	5.0	μg/L			SW-846 6020B	6/11/19	6/13/19 18:13	HLM
Zinc		ND	10				SW-846 6020B	6/11/19	6/14/19 8:44	QNW
			••	μg/L	ı		SW-846 6020B	6/11/19	6/13/19 18:13	MJH



#### Sample Extraction Data

Prep Method: SW-846 3510C-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
19F0402-01 [GP-3 MW]	B232960	1000	2.00	06/11/19	
19F0402-02 [GP-5 MW]	B232960	1000	2.00	06/11/19	
19F0402-03 [GP-7 MW]	B232960	945	1.80	06/11/19	
19F0402-04 [MW-2]	B232960	1020	2.00	06/11/19	

#### Prep Method: MA VPH-MADEP-VPH-Feb 2018 Rev 2.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
19F0402-01 [GP-3 MW] 19F0402-02 [GP-5 MW] 19F0402-03 [GP-7 MW] 19F0402-04 [MW-2]	B233005 B233005 B233005 B233005	5 5 5	5.00 5.00 5.00 5.00	06/11/19 06/11/19 06/11/19	
			5.00	06/11/19	

### Prep Method: SW-846 3005A Dissolved-SW-846 6020B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
19F0402-01 [GP-3 MW]	B233013	50.0	50.0	06/11/19	
19F0402-02 [GP-5 MW]	B233013	50.0	50.0	06/11/19	
19F0402-03 [GP-7 MW]	B233013	50.0	50.0	06/11/19	
19F0402-04 [MW-2]	B233013	50.0	50.0	06/11/19	

### Prep Method: SW-846 7470A Dissolved-SW-846 7470A

#### Prep Method: SW-846 3510C-SW-846 8081B

Lab Number [Field ID]	Batch	Initial (mL)	Final [mL]	Date	
19F0402-02 [GP-5 MW]	B232858	950	10.0	06/09/19	
19F0402-03 [GP-7 MW]	B232858	870	10.0	06/09/19	

#### Prep Method: SW-846 3510C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
19F0402-02 [GP-5 MW]	B232856	950	10.0	06/09/19	
19F0402-03 [GP-7 MW]	B232856	870	10.0		
		0,0	10.0	06/09/19	

#### Prep Method: SW-846 3510C-SW-846 8151A

i,ab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
F0402-02 [GP-5 MW]	B232959	980	5.00	06/10/19	
19F0402-03 [GP-7 MW]	B232959	1000	5.00	06/10/19	



### Sample Extraction Data

#### Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date	
19F0402-01 [GP-3 MW] 19F0402-02 [GP-5 MW] 19F0402-03 [GP-7 MW] 19F0402-04 [MW-2]	B232980 B232980 B232980 B232980	5 5 5 5	5.00 5.00 5.00 5.00	06/11/19 06/11/19 06/11/19 06/11/19	
				00/11/19	

#### Prep Method: SW-846 3510C-SW-846 8270D

19F0402-01 [GP-3 MW] B233211 1000 2.00 06/12/19 19F0402-02 [GP-5 MW] B233211 1000 2.00 06/12/19 19F0402-03 [GP-7 MW] B233211 945 1.80 06/12/19 19F0402-04 [MW-2] B233211 1000 2.00	Lab Number (Field ID)	Batch	Initial [mL]	Final [mL]	Date	
VV. 1.7	19F0402-02 [GP-5 MW] 19F0402-03 [GP-7 MW]	B233211 B233211	1000 945	2.00 1.80	06/12/19 06/12/19	



Bank (1212986 BLK1)   Propert 06/11/19 Analyzed: 04/12/19   R-05	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Page   Page	Batch B232980 - SW-846 5030B									**	*
No.   10   10   10   10   10   10   10   1					Prepared: 06	/11/19 Analy	zcd: 06/12/1	9			<del></del>
Bereader   ND		ND	10	μg/L							P. 05
Bromocharocace		ND	0.50	μ <b>g/L</b>							14-05
Bromecharementane		ND	1.0	μg/L							
Bromodibleomenhane		ND	1.0	μg/L							
Bromosform   ND   1.0   pg/L		ND	1.0	μg/L							
Bromanethane		ND	1.0	μg/L							
2-Buttone (MEK) ND 10 pg/L		ND		μg/L							
n-Buylbeanzene ND 1.0 pg/L  ter-Buylbeanzene ND 1.0 pg/L  ter-Buylbeanzene ND 1.0 pg/L  ter-Buylbeanzene ND 1.0 pg/L  ter-Buylbeanzene ND 0.50 pg/L  Carbon Distalfiel ND 0.50 pg/L  Carbon Distalfiel ND 0.50 pg/L  Carbon Distalfiel ND 0.50 pg/L  Chlorochanzen ND 1.0 pg/L  Chlorochanzene ND 0.50 pg/L  Chlor				μg/L							
see-Bulythenzene ND 1.0 pg/L tert-Bulythenzene ND 1.0 pg/L tert-Bulyt Ehry Ehry Ehry Ehry Ehry Ehry Ehry Ehry		ND		μg/L							
Inter-Buryl Edwyl Ether (TBEE)	·										
Inter-Bury Libry Ether (TBEE)   ND   S.50   mg/L											
Carbon Tisulific ND 1.0 spl. Carbon Tisulific ND 1.0 spl. Carbon Tisulific ND 1.0 spl. Carbon Tisulific ND 1.0 spl. Carbon Tisulific ND 1.0 spl. Carbon Tisulific ND 1.0 spl. Carbon Tisulific ND 1.0 spl. Chlorochanzen ND 1.0 spl. Chlorochanzen ND 2.0 spl. Chlorochanzen ND 2.0 spl. Chlorochanzen ND 2.0 spl. Chlorochanzen ND 2.0 spl. Chlorochanzen ND 2.0 spl. Chlorochanzen ND 1.0 spl. Chlorochanzen ND 1.0 spl. Chlorochanzen ND 1.0 spl. Chlorochanzen (EDEP) ND 2.0 spl. Chlorochanzen (EDEP) ND 2.0 spl. Chlorochanzen (EDE) ND 1.0 spl. Chlorochanzen ND 1.0 spl. Chl	-										
Carbon Tetrachloride ND 1.0 ag/L Chlorobenzene ND 1.0 ag/L Chlorobenzene ND 0.50 pg/L Chlorobenzene ND 0.50 pg/L Chlorobenane ND 0.50 pg/L Chlorobenane ND 0.00 pg/L Chlorobenane ND 0.00 pg/L Chlorobenane ND 0.00 pg/L Chlorobenane ND 1.0 pg/L Chlorobene ND 1.0 pg/L Chlorobene ND 1.0 pg/L Chlorobene ND 1.0 pg/L Chlorobene ND 0.00 pg/L Chlorob											
Chlorochanzene ND 1.0 μg/L Chlorochanzene ND 0.50 μg/L Chlorochanzene ND 0.20 μg/L Chlorochanzene ND 2.0 μg/L Netormathane ND 2.0 μg/L Netormathane ND 2.0 μg/L Netormathane ND 1.0 μg/L Chlorochanzene ND 1.0 μg/L Chlorocholane ND 1.0 μg/L C-Dictorolochane ND 1.0 μg/L 1.2-Dibromo-chlana (EDB) ND 0.50 μg/L 1.2-Dibromo-chlana (EDB) ND 0.50 μg/L 1.2-Dibromo-chlana (EDB) ND 1.0 μg/L 1.2-Dibromo-chlana (EDB) ND 1.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichlorochanzene ND 0.0 μg/L 1.3-Dichloro											
Chlorodibromomethane ND 0.50					ř						
Chlorochane ND 2.0											
Chloroform  ND  2.0											
"hloromethane         ND         2.0         µg/L           Chloroducane         ND         1.0         µg/L           4-Chloroducane         ND         1.0         µg/L           1,2-Dibrome-3-chloropropane (DBCP)         ND         2.0         µg/L           1,2-Dibromechane (EDB)         ND         0.50         µg/L           1,2-Dichlorobenzene         ND         1.0         µg/L           1,2-Dichlorobenzene         ND         1.0         µg/L           1,3-Dichlorobenzene         ND         1.0         µg/L           1,4-Dichlorobenzene         ND         1.0         µg/L <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
Chlorotoluene											
4-Chlorotoluene ND 1.0 μg/L 1.2-Dibromo-3-chloropropane (DBCP) ND 2.0 μg/L 1.2-Dibromo-3-chloropropane (DBCP) ND 0.50 μg/L 1.2-Dibromo-shane (EBB) ND 0.50 μg/L 1.2-Dibromo-shane (EBB) ND 0.50 μg/L 1.2-Dibromo-shane (EBB) ND 0.50 μg/L 1.2-Dibromo-shane (EBB) ND 0.50 μg/L 1.3-Dichlorobenzene ND 1.0 μg/L 1.3-Dichlorobenzene ND 1.0 μg/L 1.3-Dichlorobenzene ND 1.0 μg/L 1.3-Dichlorochlane (Freen 12) ND 2.0 μg/L 1.3-Dichlorochlane ND 1.0 μg/L 1.3-Dichlorochlane ND 1.0 μg/L 1.3-Dichlorochlane ND 1.0 μg/L 1.3-Dichlorochlane ND 1.0 μg/L 1.3-Dichlorochlane ND 1.0 μg/L 1.3-Dichlorochlylene ND 1.0 μg/L 2.Dichloropropane ND 1.0 μg/L 2.Dichloropropane ND 0.50 μg/L 2.Dichloropropane ND 0.50 μg/L 1.3-Dichloropropane ND 0.50 μg/L 1.3-											
1.2-Dibromo-3-chloropropane (DBCP)   ND   2.0   Bg/L     1.2-Dibromoethane (EDB)   ND   0.50   Hg/L     1.2-Dibromoethane (EDB)   ND   0.50   Hg/L     1.2-Dichlorobenzene   ND   1.0   Hg/L     1.3-Dichlorobenzene   ND   1.0   Hg/L     1.3-Dichlorobenzene   ND   1.0   Hg/L     1.4-Dichlorobenzene   ND   1.0   Hg/L     1.4-Dichlorobenzene   ND   1.0   Hg/L     1.1-Dichlorothane   ND   1.0   Hg/L     1.1-Dichlorothylene   ND   1.0   Hg/L     1.1-Dichlorothylene   ND   1.0   Hg/L     1.1-Dichlorothylene   ND   1.0   Hg/L     1.2-Dichlorothylene   ND   0.50   Hg/L     1.2-Dichlorothylene   ND   0.50   Hg/L     1.2-Dichlorothylene   ND   0.50   Hg/L     1.2-Dichlorothylene   ND   0.50   Hg/L     1.3-Dichloropropene   ND   0.50   Hg/L     1.4-Dichloropropene											
1.2-Dibformomethane (EDB)   ND   0.50   µg/L											
Dibromomentane   ND   1.0											
	•										
A-Dichlorobenzene   ND   1.0											
A-Dichlorobenzene											
ND											
2Dichloroethane											
1.0											
rans-1,2-Dichloroethylene ND 1.0 µg/L ,2-Dichloropropane ND 1.0 µg/L ,3-Dichloropropane ND 0.50 µg/L ,2-Dichloropropane ND 0.50 µg/L ,2-Dichloropropane ND 0.50 µg/L ,2-Dichloropropene ND 0.50 µg/L ,1-Dichloropropene ND 0.50 µg/L  rans-1,3-Dichloropropene ND 0.40 µg/L  rans-1,3-Dichloropropene ND 0.40 µg/L  rans-1,3-Dichloropropene ND 0.40 µg/L  rans-1,3-Dichloropropene ND 0.50 µg/L  rans-1,3-Dichloroprope	•										
1.0											
ND											
ND   1.0   µg/L   V-05											
1-Dichloropropene   ND   0.50   μg/L	• •										
ND   0.40   Hg/L											V-05
ND   0.40   μg/L	- *										
Story   Ether   ND   2.0   µg/L											
ND											
A-Dioxane	· ·										
ND											
ND											V-16
Hexanone (MBK)	·										
opropylbenzene (Cumene) ND 1.0 μg/L  Sopropyltoluene (p-Cymene) ND 1.0 μg/L  ihyl tert-Butyl Ether (MTBE) ND 1.0 μg/L  ichylene Chloride ND 5.0 μg/L  Mcthyl-2-pentanone (MIBK) ND 10 μg/L											
Isopropyltoluene (p-Cymene)											
thyl tert-Buryl Ether (MTBE)         ND         1.0         μg/L           cthylene Chloride         ND         5.0         μg/L           Methyl-2-pentanone (MIBK)         ND         10         μg/L											
cthylene Chloride ND 5.0 µg/L Methyl-2-pentanone (MIBK) ND 10 µg/L											
Methyl-2-pentanone (MIBK)  ND  10  µg/L	7										
nulated											
ND 2.0 μg/L											
	•	ND	2.0	μg/L							



Analyte	. Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Nates	
Batch B232980 - SW-846 5030B											
Blank (B232980-BLK1)				Prepared: 06	/11/10 Anal-		n				
n-Propylbenzene	ND	1.0	μg/L	110,000	/11/17 /Allaly	72cu. 00/12/1	<del>9</del>				
Styrene	ND	1.0	μg/L								
,1,1,2-Tetrachloroethane	ND	1.0	μg/L						,		
,1,2,2-Tetrachloroethane	ND	0.50	μg/L								
Tetrachloroethylene	ND	1.0	μg/L								
Cetrahydrofuran	ND	2.0	μg/L								
Toluene	ND	1.0	μg/L								
,2,3-Trichlorobenzene	ND	2.0	μg/L μg/L								
,2,4-Trichlorobenzene	ND	1.0									
,1,1-Trichloroethane	ND ND	1.0	μg/L σ								
.1,2-Trichloroethane	ND	1.0	μg/L ····								
richloroethylene		1.0	μg/L								
richlorofluoromethane (Freon 11)	ND		μg/L								
2,3-Trichloropropane	ND	2.0	μg/L								
2,4-Trimethylbenzene	ND	2.0	μg/L								
3,5-Trimethylbenzene	ND	1.0	μg/L								
inyl Chloride	ND	1.0	μg/L								
+p Xylene	ND	2.0	μg/L								
Xylene	ND	2.0	μg/L								
<u> </u>	ND	1.0	μg/L								
arrogate: 1,2-Dichloroethane-d4	23.7		μg/L	25.0	_	94.6	70-130			· · · · · · · · · · · · · · · · · · ·	-
urrogate: Toluene-d8	24.8		μg/L	25.0		99.2	70-130				
urogate: 4-Bromofluorobenzene	24.9		μg/L	25.0		99.5	70-130				
CS (B232980-BS1)				Prepared: 06/1	11/19 Analy2	red: 06/12/19	)				
celone	116	10	μg/L	100		116	40-160			D 05	_
t-Amyl Methyl Ether (TAME)	9.38	0.50	μ <u>α</u> /L	10.0		93.8	70-130			R-05	
nzene	10.2	1.0	μg/L	10.0		102	70-130				
omobenzene	10.8	1.0	μg/L	10.0		108	70-130				
omochloromethane	10.4	1.0	μg/L	10.0		104	70-130				
omodichloromethane	10,4	1.0	μg/L	10.0		104	70-130 70-130				
omoform	10.0	1.0	μg/L	10.0		100					
omomethane	4.10	2.0	μg/L	10.0		41.0	70-130				
Butanone (MEK)	98.6	10	μg/L	100			40-160			L-14	
Butylbenzene	10.3	1.0	μg/L	10.0		98.6	40-160				
-Butylbenzene	10.6	1.0	μg/L	10.0		103	70-130				
-Butylbenzene	10.4	1.0	μg/L	10.0		106	70-130				
-Butyl Ethyl Ether (TBEE)	9.14	0.50	μg/L			104	70-130				
bon Disulfide	10.2	5.0	μg/L	10.0		91.4	70-130				
bon Tetrachloride	9.89	1.0		10.0		102	70-130				
orobenzene		1.0	μg/L ug/I	10.0		98.9	70-130				
orodibromomethane	11.1 9.64	0.50	μg/L	10.0		111	70-130				
oroethane			μg/L	10.0		96.4	70-130				
oroform	9.59	2.0	μg/L	10.0		95.9	70-130				
oromethane	10.3	2.0	μg/L σ	10.0		103	70-130				
hlorotoluene	13.5	2.0	μg/L	10.0		135	40-160			L-14, V-20	
hlorotoluene	11.0	1.0	μg/L	10.0		110	70-130				
Dibromo-3-chloropropane (DBCP)	11.0	1.0	μg/L	10.0		110	70-130				
Dibromoethane (EDB)	10.2	2.0	μg/L	10.0		102	70-130				
romomethane	10.6	0.50	μg/L	10.0		106	70-130				
Dichlorobenzene	10.0	1.0	μg/L	10.0		100	70-130				
Dichlorobenzene Dichlorobenzene	11.0	1.0	μg/L	10.0		110	70-130				
>icinorobenzene	11.2	1.0	μg/L	10.0		112	70-130				
Dichlorobenzene							.0-100				



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B232980 - SW-846 5030B										110103	
LCS (B232980-BS1)				Prepared: 06	/11/10 Anale	mad: 06/12/1	10				
Dichlorodifluoromethane (Freon 12)	6.89	2.0	μg/L	10.0	TITE Allaly			<del></del>			
1.1-Dichloroethane	10.0	1.0	μg/L	10.0		68.9	40-160			L-14	
1,2-Dichloroethane	10.3	1.0	μg/L	10.0		100	70-130				
,1-Dichloroethylene	10.1	1.0	μg/L	10.0		103	70-130				
ris-1,2-Dichloroethylene	9.87	1.0	μg/L	10.0		101	70-130				
rans-1,2-Dichloroethylene	9.99	1.0	μg/L	10.0		98.7	70-130				
,2-Dichloropropane	10.4	1.0	μg/L	10.0		99.9	70-130				
,3-Dichloropropane	10.1	0.50	μg/L			104	70-130				
,2-Dichloropropane	8.05	1.0	μg/L μg/L	10.0		101	70-130				
,1-Dichloropropene	9.91	0.50		10.0		80.5	70-130			V-05	
is-1,3-Dichloropropene	9.60	0.40	μg/L ug/	10.0		99.1	70-130				
ans-1,3-Dichloropropene	9.39	0.40	μg/L ug/I	10.0		96.0	70-130				
iethyl Ether	9.90	2.0	μg/L ug/I	10.0		93.9	70-130				
iisopropyl Ether (DIPE)	9.61	0.50	μg/L	10.0		99.0	70-130				
4-Dioxane	9.61 107	50	μg/L π	10.0		96.1	70-130				
hylbenzene			μg/L	100		107	40-160			V-16	
exachlorobutadiene	10.9	1.0	μg/L	10.0		109	70-130				
Hexanone (MBK)	11.4	0.60	μg/L 	10.0		114	70-130				
opropylbenzene (Cumene)	98.6	10	μg/L	100		98.6	40-160				
sopropyltoluene (p-Cymene)	11,2	1.0	μg/L	10.0		112	70-130				
ethyl tert-Butyl Ether (MTBE)	10.5	1.0	μg/L -	10.0		105	70-130				
ethylene Chloride	10.3	1.0	μg/L	10.0		103	70-130				
Methyl-2-pentanone (MIBK)	10.3	5.0	μg/L	10.0		103	70-130				
aphthalene	97.8	10	μg/L	100		97.8	40-160				
Propylbenzene	10.7	2.0	μg/L	10.0		107	70-130				
yrene	11,1	1.0	μg/L	10.0		111	70-130				
,1,2-Tetrachloroethane	11.0	1.0	μg/L	10.0		110	70-130				
,2,2-Tetrachloroethane	11.1	1.0	μg/L	10.0		111	70-130				
trachloroethylene	11.0	0.50	μg/L	10.0		110	70-130				
rahydrofuran	11.5	1.0	μg/L	10.0		115	70-130				
uene	10.7	2.0	μg/L	10.0		107	70-130				
	10.4	1.0	μg/L	10.0		104	70-130				
,3-Trichlorobenzene	10.7	2.0	μg/L	10.0		107	70-130				
,4-Trichlorobenzene	10.7	1.0	μg/L	10.0		107	70-130				
,1-Trichloroethane	10.2	1.0	μg/L	10.0		102	70-130				
2-Trichloroethane	10.8	1.0	μg/L	10.0		108	70-130				
chloroethylene	11.2	1.0	μg/L	10.0		112	70-130				
chlorofluoromethane (Freon 11)	9.14	2.0	μg/L	10.0		91.4	70-130				
3-Trichloropropane	10.9	2.0	μg/L	10.0		109	70-130				
4-Trimethylbenzene	10.0	1.0	μg/L	10.0		100	70-130				
5-Trimethylbenzene	10.7	1.0	μg/L	10.0		107	70-130				
yl Chloride	8.55	2.0	μg/L	10.0		85.5	70-130				
Xylene	22.0	2.0	μg/L	20.0		110					
ylene	11.2	1.0	μg/L	10.0		112	70-130 70-130				
ogate: 1,2-Dichtoroethane-d4	24.2		μg/L	25.0		97.0	70-130		·		_
ogate: Toluene-d8	24.8		μg/L	25.0		99.2	70-130				
ogate: 4-Bromofluorobenzene	25.4		μg/L	25.0		102	70-130 70-130				



Analyte	Result	Reporting Limit	Units	Spike	Source	0/850	%REC	nnn	RPD		
Batch B232980 - SW-846 5030B	Kesan	Limit	Onis	Level	Result	%REC	Limits	RPD	Limit	Notes	
LCS Dup (B232980-BSD1)				Prepared: 06	6/11/19 Analy	vzed: 06/12/1	9				
Accione	93.3	10	μg/L	100	"11117 7111ui)	93.3	40-160	21.4 *	20	R-05	<del>-</del>
tert-Amyl Methyl Ether (TAME)	9.37	0.50	rs~ μg/L	10.0		93.7	70-130	0.107	20	K-05	t
Benzene	9,98	1.0	μg/L	10.0		99.8	70-130	2.08			
Broniebenzene	10.4	1.0	μg/L	10.0		104	70-130	3.11	20 20		
Bromochloromethane	10.2	1.0	μg/L	10.0		104	70-130	1.45	20		
Bromodichloromethane	10.2	1.0	μg/L	10.0		102	70-130 70-130	1.65	20		
Bromoform	9.67	1.0	μg/L	10.0		96.7	70-130	3.46			
Bromomethane	4.13	2.0	μg/L	10.0		41.3	40-160	0.729	20		_
2-Butanone (MEK)	90.4	10	μg/L	100		90.4	40-160	8.71	20 20	L-14	†
n-Butylbenzene	9.91	1.0	μg/L	10.0		99.1	70-130				t
sec-Butylbenzene	10.6	1.0	μg/L	10.0		106	70-130 70-130	3.76 0.00	20		
tert-Butylbenzene	10.3	1.0	μg/L	10.0		-103	70-130		20		
tert-Butyl Ethyl Ether (TBEE)	9.10	0.50	μg/L	10.0		91.0		1.06	20		
Carbon Disulfide	9.50	5.0	μg/L				70-130	0.439	20		
Carbon Tetrachloride	9.30	1.0	րը/L	10.0		95.0	70-130	7.01	20		
Chlorobenzene		1.0		10.0		97.6	70-130	1.32	20		
Chlorodibromomethane	11.0	0.50	μg/L	10.0		110	70-130	0.724	20		
Chloroethane	9.67	2.0	μg/L ··/r	10.0		96.7	70-130	0.311	20		
Chloroform	9.60		μg/L	10.0		96.0	70-130	0.104	20		
Aloromethane	10.1	2.0	μg/L	10.0		101	70-130	1.57	20		
2-Chiorotoluene	13.4	2.0	μg/L	10.0		134	40-160	0.594	20	L-14, V-20	t
4-Chlorotoluene	10.4	1.0	μg/L	10.0		104	70-130	6.16	20		
1,2-Dibromo-3-chloropropane (DBCP)	10.6	1.0	μg/L 	10.0		106	70-130	3.52	20		
1,2-Dibromoethane (EDB)	9.81	2.0	μg/L	10.0		98.1	70-130	4.00	20		
Dibromomethane	10.7	0.50	μg/L	10.0		107	70-130	0.375	20		
	10.2	1.0	μg/L	10.0		102	70-130	1.98	20		
1,2-Dichlorobenzene	10.8	1.0	μg/L	10.0		108	70-130	1.19	20		
1,3-Dichlorobenzene	11.0	1.0	μg/L	10.0		110	70-130	2.43	20		
I,4-Dichlorobenzene	10.7	1.0	μg/L	10.0		107	70-130	0.742	20		
Dichlorodifluoromethane (Freon 12)	6.69	2.0	μg/Ľ	10.0		66.9	40-160	2.95	20	L-14	t
1,1-Dichloroethane	9.69	1.0	μg/L	10.0		96.9	70-130	3.45	20		
1,2-Dichloroethane	10.2	1.0	μg/L	10.0		102	70-130	1.56	20		
I,1-Dichloroethylene	9.99	1.0	μg/L	10.0		99.9	70-130	1.10	20		
cis-1,2-Dichloroethylene	9.73	1.0	μg/L	10.0		97.3	70-130	1.43	20		
trans-1,2-Dichloroethylene	9.58	1.0	μg/L	10.0		95.8	70-130	4.19	20		
1,2-Dichloropropane	10.4	1.0	μg/L	10.0		104	70-130	0.0965	20		
1,3-Dichloropropane	9.72	0.50	μg/L	10.0		97.2	70-130	4.23	20		
2,2-Dichloropropane	7.75	1.0	μg/L	10.0		77.5	70-130	3.80	20	V-05	
1,1-Dichloropropene	9.80	0.50	μg/L	10.0		98.0	70-130	1.12	20		
eis-1,3-Dichloropropene	9.61	0.40	μg/L	10.0		96.1	70-130	0.104	20		
rans-1,3-Dichloropropene	9.40	0.40	μg/L	10.0		94.0	70-130	0.106	20		
Diethyl Ether	10.1	2.0	μg/L	10.0		101	70-130	2.10	20		
Diisopropyl Ether (DIPE)	9.41	0.50	μg/L	10.0		94.1	70-130	2.10	20		
,4-Dioxane	97.7	50	μg/L	100		97.7	40-160	9.13	20	V-16	†
Ethylbenzene	10.4	1.0	μg/L	10.0		104	70-130	4.70	20		
	11.7	0.60	μg/L	10.0		117	70-130	2.34	20		
2-Hexanone (MBK)	93.7	10	μg/L	100		93.7	40-160	5.10	20		t
sopropylbenzene (Cumene)	10.6	1.0	μg/L	10,0		106	70-130	4.95	20		,
Isopropyltoluene (p-Cymene)	10.2	1.0	μg/L	10.0		102	70-130	2.99	20		
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	μg/L	10.0		102	70-130	1.27	20		
Methylene Chloride	10.4	5.0	μg/L	10.0		104	70-130	0.483	20		
I-Methyl-2-pentanone (MIBK)	95.0	10	μg/L	100		95.0	40-160	2.85	20		
Naphthalene		2.0	μg/L								İ
	10.7	ž. <b>U</b>	rgr	10.0		107	70-130	0.0932	20		



Analyte .	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	. RPD	RPD Limit	Notes
Batch B232980 - SW-846 5030B										
.CS Dup (B232980-BSD1)				Prepared: 06	/11/10 Analı	d. 06/13/				
-Propylbenzene	10.6	1.0	μg/L	10.0	ATTI Allai				<del></del>	
ityrene	10.6	1.0	μg/L μg/L	10.0		106	70-130	4.60	20	
,1,1,2-Tetrachloroethane	10.7	1.0	μg/L μg/L			106	70-130	3.90	20	
,1,2,2-Tetrachloroethane	11.3	0,50		10.0		107	70-130	3.30	20	
ctrachloroethylene	11.0	1.0	μg/L	10.0		113	70-130	2.15	20	
etrahydrofuran		2.0	μg/L	10.0		110	70-130	4.34	20	
oluene	10.2		μg/L	10.0		102	70-130	5.18	20	
2,3-Trichlorobenzene	10.5	1.0	μg/L	10.0		105	70-130	0.953	20	
2,4-Trichlorobenzene	10.3	2.0	μg/L -	10.0		103	70-130	3.61	20	
1,1-Trichloroethane	10.7	1.0	μg/L	10.0		107	70-130	0.748	20	
1,2-Trichloroethane	9.89	1.0	μg/L	10.0		98.9	70-130	3.28	20	
richloroethylene	11.1	1.0	μg/L	10.0		111	70-130	2.83	20	
richlorofluoromethane (Freon 11)	10.8	1.0	μg/L	10.0		108	70-130	3.47	20	
2,3-Trichloropropane	8.73	2.0	μg/L	10.0		87.3	70-130	4.59	20	
2,4-Trimotopropane	10.6	2.0	μg/L	10.0		106	70-130	2.60	20	
-	10.1	1.0	μg/L	10.0		101	70-130	0.896	20	
3,5-Trimethylbenzene	10.5	1.0	μg/L	10.0		105	70-130	2.17	20	
nyl Chloride	8.31	2.0	μg/L	10.0		83.1	70-130	2.85	20	
+p Xylene	21.1	2.0	μg/L	20.0		105	70-130	4.18	20	
Xylene	10.8	1.0	μg/L	10.0		108	70-130	3.00	20	
rrogate: 1,2-Dichloroethane-d4	23.5		μg/L	25.0						
rrogate: Toluene-d8	24,7		μg/L μg/L	25.0 25.0		94.2	70-130			
rrogate: 4-Bromofluorobenzene	25.5		μg/L μg/L	25.0 25.0		98.9 102	70-130 70-130			



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B233211 - SW-846 3510C										
Blank (B233211-BLK1)				Prepared: 06	/12/19 Anals	vzed: 06/13/1	9	****	·	
Benzo(a)anthracene (SIM)	ND	1.0	μg/L			, zcu. 00/15/1				
Benzo(a)pyrene (SIM)	ND	0.20	μg/L							
Benzo(b)fluoranthene (SIM)	ND	1.0	μg/L							
Benzo(k)fluoranthene (SIM)	ND	1.0	μg/L							
Chrysene (SIM)	ND	2.0	μg/L							
Dibenz(a,h)anthracene (SIM)	ND	0.50	μg/L							
ndeno(1,2,3-ed)pyrene (SIM)	ND	0.50	μg/L							
urrogate: o-Terphenyl (OTP) (SIM)	62.4		μg/L	100		62.4	30-130		***************************************	
.CS (B233211-BS1)				Prepared: 06/	12/10 Analy	rand: 06/13/1				
enzo(a)anthracene (SIM)	67.4	20	μg/L	100	12019 Allaly	67.4				
enzo(a)pyrene (SIM)	72.3	4.0	μg/L	100		67.4 72,3	40-140			
lenzo(b)fluoranihene (SIM)	71,3	20	μg/L	100			40-140			
ienzo(k)fluoranthene (SIM)	75.3	20	μg/L	100		71.3 75.3	40-140			
hrysene (SIM)	69,4	40	μg/L	100			40-140			
Pibenz(a,h)anthracene (SIM)	80.3	10	μg/L	100		69.4	40-140			
ndeno(1,2,3-cd)pyrene (SIM)	75.0	10	μg/L	100		80.3 75.0	40-140 40-140			
штоgate: o-Terphenyl (ОТР) (SIM)	73.2		μg/L	100		73.2	30-130			
CS Dup (B233211-BSD1)				Prepared: 06/	12/19 Analy	zed: 06/13/19				
enzo(a)anthracene (SIM)	56.3	20	μg/L	100		56.3	40-140	18.0		
enzo(a)pyrene (SIM)	60.0	4.0	μg/L	100		60.0	40-140	18.6	20	
enzo(b)fluoranthene (SIM)	59.6	20	μg/L	100		59.6	40-140	17.9	20	
enzo(k)fluoranthene (SIM)	63.0	20	μg/L	100		63.0	40-140	17.9	20	
rysene (SIM)	58.3	40	μg/L	100		58.3	40-140	17.8	20	
ibenz(a,h)anthracene (SIM)	67.0	10	μg/L	100		67.0	40-140		20	
deno(1,2,3-cd)pyrene (SIM)	62.2	10	μg/L	100		62.2	40-140 40-140	18.0 18.7	20 20	
arrogate: o-Terphenyl (OTP) (SIM)	61.4						.0 110	10.7	4V	



### Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232858 - SW-846 3510C										Notes
Blank (B232858-BLK1)			_	Prepared: 06	/09/19 Anals	mod: 06/12/1	······································	<del></del>		
Aldrin	ND	0.050	μg/L	111-11-11-11-11	OSTI ZINGI	/2cu. 00/12/1	<del>y</del>			
Aldrin [2C]	ND	0.050	μg/L							
ilpha-BHC	ND	0.050	μg/L							
lpha-BHC [2C]	ND	0.050	μg/L							
oeta-BHC	ND	0.050	μg/L							
eta-BHC [2C]	ND	0.050	μg/L μg/L							
lelta-BHC	ND	0.050	μg/L							
elta-BHC (2C)	ND	0.050								
amma-BHC (Lindane)	ND	0.030	μg/L uσ/I							
anınıa-BHC (Lindane) [2C]	ND ND	0.030	μg/L							
Chlordane		0.20	μg/L							
hlordane [2C]	ND	0.20	μg/L							
,4'-DDD	ND		μg/L							
.4'-DDD [2C]	ND	0.040	μg/L.							
4'-DDE	ND	0.040	μg/L							
4'-DDE [2C]	ND	0.040	μg/L	•						
4'-DDT	ND	0.040	μg/L							
4'-DDT [2C]	ND	0.040	μg/L							
ieldrin	ND	0.040	μg/L							
ieldrin [2C]	ND	0.0020	μg/L							
dosulfan I	ND	0.0020	μg/L							
ndosulfan I [2C]	ND	0.050	μg/L						•	
ndosulfan II	ND	0.050	μg/L							
ndosulfan II [2C]	ND	0.080	μg/L							
idosulfan Sulfate	ND	0.080	μg/L							
	ND	0.080	μg/L							
dosulfan Sulfate [2C]	ND	0.080	μg/L							
drin	ND	0.080	μg/L							
drin [2C]	ND	0.080	μg/L							
drin Aldehyde	ND	0.080	μg/L							
drin Aldehyde [2C]	ND	0.080	μg/L							
drin Ketone	ND	0.080	μg/L							
drin Ketone [2C]	ND	0.080	μg/L							
ptachlor	ND	0.050	μg/L							
ptachlor [2C]	ND	0.050	μg/L							
ptachlor Epoxide	ND	0.050	μg/L				•			
ptachlor Epoxide [2C]	ND	0.050	μg/L							
kachlorobenzene	ND	0.050	μg/L							
kachlorobenzene [2C]	ND	0.050	μg/L							
thoxychlor	ND	0.50	μg/L μg/L							
thoxychlor [2C]	ND	0.50	μg/L μg/L							
rogate: Decachlorobiphenyl	1.74			2.00		24.0				
rogate: Decachlorobiphenyl [2C]	1.77		μg/L	2.00		86.8	30-150			
rogate: Tetrachloro-m-xylene	1.60		μg/L	2.00		88.4	30-150			
rogate: Tetrachloro-m-xylene [2C]	1.79		μg/L μg/L	2.00 2.00		79.9	30-150			



### Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232858 - SW-846 3510C							· · · · · · · · · · · · · · · · · · ·			.10103
LCS (B232858-BS1)				Prepared: 06	/09/19 Anal-	uzad- 06/12/	10			·
Aldrin	0.91	0.050	μg/L	1.00	702712 Anai					
Aldrin [2C]	0.90	0.050	μg/L	1.00		90.5	40-140			
alpha-BHC	0.91	0.050	μg/L	1.00		90.4	40-140			
alpha-BHC [2C]	0.91	0.050	μg/L	1.00		90.6	40-140			
beta-BHC	0.88	0.050	μg/L	1.00		90.6	40-140			
beta-BHC [2C]	0.85	0.050	μg/L			87.7	40-140			
delta-BHC	0.63	0.050	μg/L	1.00		84.6	40-140			
delia-BHC [2C]	0.67	0.050	μg/L	1.00		62.9	40-140			
gamma-BHC (Lindane)	0.91	0.030	μg/L	1.00		66.9	40-140			
gamma-BHC (Lindane) [2C]	0.92	0.030		1.00		91.0	40-140			
1,4'-DDD	0.93	0.040	μg/L ug/I	1.00		92.0	40-140			
I,4'-DDD [2C]	0.96	0.040	μg/L	1.00		93.4	40-140			
4'-DDE	0.95	0.040	μg/L ug/	1.00		95.8	40-140			
.4'-DDE [2C]	0.93	0.040	μg/L	1.00		94.8	40-140			
4'-DDT	0.94	0.040	μg/L	1.00		94.2	40-140			
,4'-DDT [2C]			μg/L	1.00		95.5	40-140			
Dieldrin	0.91	0.040	μg/L	1.00		91.4	40-140			
Dieldrin [2C]	0.93	0.0020	μg/L	1.00		92.7	40-140			
indosulfan I	0.92	0.0020	μg/L -	1.00		91.8	40-140			
ndosulfan I (2C)	0.85	0.050	μg/L	1.00		85.2	40-140			
ndosulfan II	0.87	0.050	μg/L -	1.00		87.4	40-140			
ndosulfan II (2C)	0.80	0.080	μg/L _	1.00		79.8	40-140			
ndosulfan Sulfate	0.79	0.080	μg/L	1.00		79.3	40-140			
ndosulfan Sulfate [2C]	0.93	0.080	μg/L	1.00		93.1	40-140			
ndrin	0.91	0.080	μg/L	1.00		91.3	40-140			
ndrin [2C]	0.94	0.080	μg/L	1.00		94.0	40-140			
ndrin Ketone	0.91	0.080	μg/L	1.00		91.1	40-140			
ndrin Ketone [2C]	0.90	0.080	μg/L	1.00		90.3	40-140			
eptachlor	0.95	0.080	μg/L	1.00		95.3	40-140			
eptachlor [2C]	0.68	0.050	μg/L	1.00		68.2	40-140			
eptachlor Epoxide	0.91	0.050	μg/L	1.00		90.6	40-140			
ptachlor Epoxide [2C]	0.89	0.050	μg/L	1.00		89.3	40-140			
exachlorobenzene	0.87	0.050	μg/L	1.00		87.4	40-140			
xachlorobenzene [2C]	1.0	0.050	μg/Ľ	1.00		101	40-140			
	0.91	0.050	μg/L	1.00		90.9	40-140			
ethoxychlor	0.90	0.50	μg/L	1.00		90.2	40-140			
ethoxychlor [2C]	0.90	0.50	μ <b>g/</b> Ľ	1.00		90.1	40-140			
rrogate: Decachlorobiphenyl	1.90		μg/L	2.00		95.0	30-150			
rrogate: Decachlorobiphenyl [2C]	1.96		μg/L	2.00		97.8	30-150			
rrogate: Tetrachloro-m-xylene	1.85		μg/L	2.00		92.5	30-150			
rrogate: Tetrachloro-m-xylene [2C]	1.90		μg/L	2.00		95.0	30-150			
'S Dup (B232858-BSD1)										
Irin				Prepared: 06/09	9/19 Analyz	ed: 06/12/19				
lrin [2C]	0.93	0.050	μg/L	1.00		92.9	40-140	2.57	30	
ha-BHC	0.90	0.050	μg/L	1.00		90.3	40-140	0.163	30	
na-BHC [2C]	0.92	0.050	μg/L	1.00		92.0	40-140	1.51	30	
a-BHC	0.90	0.050	μg/L	1.00		89.9	40-140	0.749	30	
	0.87	0.050	μg/L	1.00		86.9	40-140	0.858	30	
a-BHC [2C]	18,0	0.050	μg/L	1.00		81.3	40-140	3.97	30	
a-BHC	0.49	0.050	μg/L	1.00		49.2	40-140	24.3	30	
a-BHC [2C]	0.51	0.050	μg/L	1.00		50.8	40-140	27.5	30	
ıma-BHC (Lindanc)	0.92	0.030	μg/L	1.00		91.9	40-140	0.984		
ma-BHC (Lindane) [2C]	0.89	0.030	μg/L	1.00		89.4	40-140	2.79	30 30	



#### Organochloride Pesticides by GC/ECD - Quality Control

Analyte	. Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232858 - SW-846 3510C							······································	<del></del>		
LCS Dup (B232858-BSD1)				Prepared: 06	/09/19 Analy	rzed: 06/12/1	0	***		
4,4'-DDD	0.95	0.040	μg/L	1.00		95.2	40-140	1.92		
4,4'-DDD [2C]	0.96	0.040	μg/L	1.00		96.4	40-140	0.599	30	
4,4'-DDE	0.96	0.040	μg/L	1.00		96.4	40-140	1.73	30	
4,4'-DDE [2C]	0.95	0.040	μg/L	1.00		94.8	40-140	0.732	30	
4,4'-DDT	0.97	0.040	μg/L	1.00		97.2	40-140		30	
4,4'-DDT [2C]	0.92	0.040	μg/L	1.00		92.5	40-140	1.83 1.19	30	
Dieldrin	0.94	0.0020	μg/L	1.00		94.0	40-140	1.19	30	
Dieldrin [2C]	0.92	0.0020	μg/L	1.00		91.5	40-140	0.253	30	
Endosulfan I	0.83	0.050	μg/L	1.00		82.7	40-140	2.93	30	
Endosulfan I [2C]	0.83	0.050	μg/L	1.00		83.2	40-140		30	
Endosulfan II	0.79	0.080	μg/L	1.00		78.7	40-140	4.94	30	
Endosulfan II (2C)	0.77	0.080	μg/L	1.00		76.7 77.2	40-140	1.45	30	
Endosulfan Sulfate	0,94	0.080	μg/L	1.00		93.7	40-140	2.76	30	
Endosulfan Sulfate [2C]	0,91	0.080	μg/L	1.00		90.6	40-140	0.615	30	
Endrin	0.95	0.080	μg/L	1.00		95.3	40-140	0.699	30	
Endrin (2C)	0.91	0.080	μg/L	1.00		90.7		1.33	30	
Endrin Ketone	0.92	0.080	μg/L	1.00		92.2	40-140	0.470	30	
Endrin Ketone [2C]	1.0	0.080	μg/L	1.00		101	40-140	2.03	30	
Teptachlor	0.70	0.050	μg/L	1.00		70.4	40-140	5.76	30	
.eptachlor [2C]	0.90	0.050	μg/L	1.00		70.4 89.8	40-140	3.17	30	
Leptachlor Epoxide	0.91	0.050	μg/L	1.00		90.7	40-140 40-140	0.844	30	
Teptachlor Epoxide [2C]	0.87	0.050	μg/L	1.00		86.6	40-140	1.60	30	
łexachlorobenzene	1.0	0.050	μg/L	1.00		104		0.953	30	
fexachlorobenzene [2C]	0.91	0.050	μg/L	1.00		91.3	40-140	3.27	30	
Methoxychlor	0.91	0.50	μg/L	1.00		91.5	40-140	0.470	30	
Acthoxychlor [2C]	0.91	0.50	μg/L	1.00		90.5	40-140 40-140	1.45 0.479	30 30	
urrogate: Decachlorobiphenyl	1.92		μg/L	2.00		96.2		3.777		
Surrogate: Decachlorobiphenyl [2C]	1.96		μg/L	2.00		90.2 97.9	30-150 30-150			
urrogate: Tetrachloro-m-xylene	1.91		μg/L	2.00		97.9 95.4	30-150 30-150			
iurrogate: Tetrachloro-m-xylene [2C]	1.90		μg/L	2.00		95.1 95.1	30-150 30-150			



### Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232856 - SW-846 3510C					***			-45		140105
Blank (B232856-BLK1)				Prepared: 06	/09/19 Anal-	vzed: 06/11/1	9			
Aroclor-1016	ND	0.20	μg/L			200.00/11/				
Aroclor-1016 [2C]	ND	0.20	μg/L							
Aroclor-1221	ND	0.20	μg/L							
Araclor-1221 [2C]	ND	0.20	μg/L							
Aroclor-1232	ND	0.20	μg/L							
Aroclor-1232 [2C]	ND	0.20	μg/L							
Aroclor-1242	ND	0.20	μg/L							
Aroclor-1242 [2C]	ND	0.20	μg/L							
Aroclor-1248	ND	0.20	μg/L							
Aroclor-1248 [2C]	ND	0.20	μg/L							
Aroclor-1254	ND	0.20	μg/L							
Aroclor-1254 [2C]	ND	0.20	μg/L							
Aroclor-1260	ND	0.20	μg/L							
Aroclor-1260 [2C]	ND	0.20	μg/L							
Aroclor-1262	ND	0.20	μg/L							
troclor-1262 [2C]	ND	0.20	μg/L							
rocior-1268	ND	0.20	μg/L							
roclor-1268 [2C]	ND	0.20	μg/Ľ							
urrogate: Decachlorobiphenyl	1.81		μg/L	2.00		90.4	20.150			
urogate: Decachlorobiphenyl [2C]	1.67		μg/L	2.00		90.4 83.7	30-150			
агrogate: Tetrachloro-m-xylene	1.62		μg/L	2.00		80.8	30-150 30-150			
urrogate: Tetrachloro-m-xylene [2C]	1.50		μg/L	2.00		74.9	30-150			
CS (B232856-BS1)				Prepared: 06/0	19/19 Analy					
roclor-1016	0.50	0.20	μg/L	0.500	oor to remary	99.5				
roclor-1016 [2C]	0.50	0.20	μg/L	0.500		100	40-140			
roclor-1260	0.46	0.20	μg/L	0.500		91.4	40-140			
roclor-1260 [2C]	0.48	0.20	μg/L	0.500		96.3	40-140 40-140			
rrogate: Decachlorobiphenyl	1.94		μg/L	2.00		··				
rrogate: Decachlorobiphenyl [2C]	1.80		μg/L μg/L	2.00		97.0	30-150			
rrogate: Tetrachloro-m-xylene	1.80		μg/L	2.00		90.1 89.9	30-150			
rrogate: Tetrachloro-m-xylene [2C]	1.65		μg/L	2.00		82.3	30-150 30-150			
CS Dup (B232856-BSD1)				Prepared: 06/0	10/10 Amalum					
oclor-1016	0.50	0.20	μg/L		OITS Analys					
oclor-1016 [2C]	0.51	0.20		0.500		101	40-140	1.34	20	
oclor-1260	0.46	0.20	μg/L ug/ī	0.500		103	40-140	2.43	20	
oclor-1260 [2C]	0.48	0.20	μg/L μg/L	0.500 0.500		92.3	40-140	0.908	20	
rrogate: Decachlorobiphenyl	1.97			····		96.1	40-140	0.191	20	
rogate: Decachlorobiphenyl [2C]	1.85		μg/L ug/I	2.00		98.7	30-150			
rogate: Tetrachloro-m-xylene	1.84		μg/L	2.00		92.4	30-150			
rogate: Tetrachloro-m-xylene [2C]	1.69		μg/L μg/L	2.00 2.00		92.2 84.5	30-150 30-150			



#### Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232959 - SW-846 3510C									- Dillin	140165
Blank (B232959-BLK1)				Prepared: 06	/10/19 Anals	vzed- 06/13/1	10			
2,4-D	ND	0.50	μg/L			,				
2,4-D [2C]	ND	0.50	μg/L							
2,4-DB	ND	0.50	μg/L							
2,4-DB [2C]	ND	0.50	μg/L							
2,4,5-TP (Silvex)	ND	0.050	μg/L							
2,4,5-TP (Silvex) [2C]	ND	0.050	μg/L							
2,4,5-T	ND	0.10	μg/L							
2.4,5-T [2C]	ND	0.10	μg/L							
Dalapon	ND	1.2	μg/L							
Dalapon (2C)	ND	1.2	μg/L							
Dicamba	ND	0.050	μg/L							
Dicamba [2C]	ND	0.050	μg/L							
Dichloroprop	ND	0.50	μg/L							
Dichloroprop [2C]	ND	0.50	μg/L							
Dinoseb	ND	0.25	μg/L							
Dinoseb [2C]	ND	0.25	μg/L				•			
ACPA	ND	50	μg/L							
1CPA [2C]	ND	50	μg/L							
1CPP	ND	50	μg/L							
1CPP [2C]	ND	50	μg/L							
irrogate: 2,4-Dichlorophenylacetic acid	1.64		μg/L	2.00						
urrogate: 2,4-Dichlorophenylacetic acid	1.68		μg/L μg/L	2.00		82.1	30-150			
2C]			rg 2	2.00		84.2	30-150			
CS (B232959-BS1)				Prepared: 06/	10/19 Analy	zed: 06/13/1	9			
,4-D	2.04	0.50	μg/L	2.50		81.6	40-140			
,4-D [2C]	2.16	0.50	μg/L	2.50		86.2	40-140			
4-DB	2.09	0.50	μg/L	2.50		83.6	40-140			
4-DB [2C]	2.17	0.50	μg/L	2.50		86.7	40-140			
4,5-TP (Silvex)	0.223	0.050	μg/L	0.250		89.1	40-140			
4,5-TP (Silvex) [2C]	0.215	0.050	μg/L	0.250		86.0	40-140			
4,5-T	0.228	0.10	μg/L	0.250		91.3	40-140			
4,5-T [2C]	0.232	0.10	μg/L	0.250		92.9	40-140			
alapon	4.05	1.2	μg/L	6.25		64.9	40-140			
alapon [2C]	4.06	1.2	μg/L	6.25		65.0	40-140			
camba	0.301	0.050	μg/L	0.250		121				
camba [2C]	0.208	0.050	μg/L	0.250			40-140			
chloroprop	2.17	0.50	μg/L	2.50		83.2 86.7	40-140			
chloroprop [2C]	2.20	0.50	μg/L	2.50			40-140			
noscb	0.943	0.25	μg/L	1.25		88.1	40-140			
noseb [2C]	0.940	0.25	μg/L	1.25		75.4	10-140			
CPA	188	50	μg/L μg/L	250		75.2	10-140			
CPA [2C]	200	50	μg/L μg/L			75.3	40-140			
CPP	204	50	μg/L μg/L	250		79.8	40-140			
CPP [2C]	203	50	μg/L μg/L	250 250		81.8	40-140			
rrogate: 2,4-Dichlorophenylacetic acid						81.2	40-140			
rrogate: 2,4-Dichlorophenylacetic acid	1.74		μg/L -	2.00		87.0	30-150			
Plant : 2,4-Dictiorophenylacette acid	1.75		μg/L	2.00		87.3	30-150			



### Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	ŖPD	RPD Limit	Notes
Batch B232959 - SW-846 3510C									***************************************	
LCS Dup (B232959-BSD1)				Prepared: 06	/10/19 Anals	rzed: 06/12/1	10		<del></del>	
2,4-D	2.08	0.50	μg/L	2,50	10/15 11/101					
2,4-D [2C]	2,20	0.50	μg/L	2.50		83.3	40-140	2.13	20	
2,4-DB	2.16	0.50	μg/L	2.50		87.9	40-140	1.93	20	
2,4-DB [2C]	2.34	0.50	μg/L	2.50		86.2	40-140	3.06	20	
4,4,5-TP (Silvex)	0.224	0.050	μg/L	0.250		93.5	40-140	7.47	20	
.4,5-TP (Silvex) [2C]	0.220	0.050	μg/L	0.250		89.5	40-140	0.520	20	
,4,5-T	0.202	0.10	րց/L μg/L	0.250		88.1	40-140	2.39	20	
.4,5-T (2C)	0.223	0.10	μg/L μg/L	0.250		81.0	40-140	12.0	20	
Palapon	4.00	1.2	μg/L μg/L	6.25		89.1	40-140	4.22	20	
alapon [2C]	4.03	1.2	μg/L μg/L			64.0	40-140	1.33	20	
icamba	0.334	0.050		6.25		64.4	40-140	0.904	20	
icamba [2C]	0.334	0.050	μg/L ug/I	0.250		134	40-140	10.3	20	
ichloroprop	2.22	0.050	μg/L	0.250		85.2	40-140	2.38	20	
ichloroprop [2C]	2.22	0.50	μg/L	2.50		88.7	40-140	2.28	20	
inoseb	0.931	0.30	μg/L	2.50		90.4	40-140	2.52	20	
inoseb [2C]		0.25	μg/L	1.25		74.5	10-140	1.25	20	
ICPA	0.947		μg/L.	1.25		75.8	10-140	0.688	20	
ICPA [2C]	196	50	μg/L	250		78.5	40-140	4.09	20	
ICPP	203	50	μg/L	250		81.4	40-140	1.97	20	
CPP [2C]	216	50	μg/L	250		86.3	40-140	5.40	20	
	206	50	μg/L	250		82.2	40-140	1.23	20	
urrogate: 2,4-Dichlorophenylacetic acid	1.80		μg/L	2.00		90.1	30-150			
rrogate: 2,4-Dichlorophenylacetic acid	1.78		μg/L	2.00		89.2	30-150			



### Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Note
Batch B232960 - SW-846 3510C										11010
Blank (B232960-BLK1)				Prepared: 06	/11/19 Analy	zed: 06/12/1	0			
C9-C18 Aliphatics	ND	100	μg/L			200. 00/12/1				
C19-C36 Aliphatics	ND	100	μg/L							
Unadjusted C11-C22 Aromatics	ND	100	μg/L							
C11-C22 Aromatics	ND	100	μg/L							
Accnaphthene	ND	2.0	μg/L							
Acenaphthylene	ND	2.0	μg/L							
Anthracene	ND	2.0	μg/L							
Benzo(g,h,i)perylene	ND	2.0	μg/L							
luoranthene	ND	2.0	μg/L							
luorene	ND	2.0	μg/L							
-Methylnaphthalene	ND	2.0	μg/L							
laphthalene	ND	2.0	μg/L							
henanthrene	ND	2.0	μg/L							
yrene	ND	2.0	μg/L							
-Decane	ND	2.0	μg/L							
-Docosane	ND	2.0	μg/L							
-Dodecane	ND	2.0	μg/L							
-Eicosane	ND	2.0	μg/L							
Hexacosane	ND	2.0	μg/L							
Hexadecane	ND	2.0	μg/L							
Hexatriacontane	ND	2.0	μg/L							
Nonadecane	ND	2.0	μg/L							
Nonane	ND	2.0	μg/L							
Octacosane	ND	2.0	μg/L							
Octadecane	ND	2.0	μg/L							
Tetracosane	ND	2.0	μg/L							
Tetradecane	ND	2.0	μg/L							
Triacontane	ND	2.0	μg/L							
phthalene-aliphatic fraction	ND	2.0	μg/L							
Methylnaphthalene-aliphatic fraction	ND	2.0	μg/L							
rrogate: Chlorooctadecane (COD)	72.8		μg/L	100		72.8	40-140			
rrogate: o-Terphenyl (OTP)	78.4		μg/L	100		78.4	40-140			
rrogate: 2-Bromonaphthalene	112		μg/L	100		112	40-140			
тоgate: 2-Fluorobiphenyl	122		μg/L	100		122	40-140			
S (B232960-BS1)				Prepared: 06/1	i/19 Analyz	rd: 06/12/10				
C18 Aliphatics	491	100	μg/Ľ	600	Tinaiya					
9-C36 Aliphatics	603	100	μg/L	800		81.8	0-200			
adjusted C11-C22 Aromatics	1280	100	μg/L	1700		75.4 75.0	0-200			
enaphthene	76.3	2.0	μg/L	100		75.0 76.3	0-200			
naphthylene	69.6	2.0	μg/L	100			40-140			
hracene	75.7	2.0	μg/L	100		69.6	40-140			
zo(g,h,i)perylene	69.6	2.0	μg/L	100		75.7	40-140			
pranthene	77.3	2.0	μg/L	100		69.6	40-140			
prene	73.3	2.0	μg/L	100		77.3	40-140			
lethylnaphthalene	64.9	2.0	μg/L			73.3	40-140			
hthalene	66.8	2.0	μg/L μg/L	100		64.9	40-140			
nanthrene	75.5	2.0	μg/L μg/L	100		66.8	40-140			
ene	73.3 78.2	2.0		100		75.5	40-140			
			μg/L ~	100		78.2	40-140			
ccane	EA 1									
ceane Deosane	50.1 79.1	2.0 2.0	μg/L μg/L	100 100		50.1 79.1	40-140 40-140			



### Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B232960 - SW-846 3510C										11010
LCS (B232960-BS1)				Prepared: 06	/11/19 Analy	rzed: 06/12/1	10			
n-Eicosane	74.2	2.0	μg/L	100		74.2	40-140			
n-Hexacosane	79.1	2.0	μg/L	100		79.1	40-140			
n-Hexadecane	73.9	2.0	μg/L	100		73.9	40-140			
n-Hexatriacontane	77.4	2.0	μg/L	100		77.4	40-140			
n-Nonadecane	74.8	2.0	μg/L	100		74.8	40-140			
n-Nonane	40.5	2.0	μg/L	100		40.5	30-140			
n-Octacosane	77.2	2.0	μg/L	100		77.2	40-140	,		
n-Octadecane	75.3	2.0	μg/L	100		75.3	40-140			
n-Tetracosane	79.1	2.0	μg/L	100		79.1	40-140			
n-Tetradecane	68.3	2.0	μg/L	100		68.3	40-140			
a-Triacontane	76.6	2.0	μg/L	100		76.6	40-140			
Naphthalene-aliphatic fraction	ND	2.0	μg/L	100			0-5			
-Methylnaphthalene-aliphatic fraction	ND	2.0	μg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	74.8		μg/L	100		74.0				
surrogate: o-Terphenyl (OTP)	77.0		μg/L μg/L	100		74.8 77.0	40-140			
urrogate: 2-Bromonaphthalene	103		μg/L μg/L	100		103	40-140			
urrogate: 2-Fluorobiphenyl	120		μg/L	100		120	40-140 40-140			
.CS Dup (B232960-BSD1)			re-							
)-C18 Aliphatics	40.4	100		Prepared: 06/	11/19 Analy:					
19-C36 Aliphatics	494	100	μg/L α	600		82.3	0-200	0.629		
nadjusted C11-C22 Aromatics	570 1290	100	μg/L	800		71.2	0-200	5.70		
cenaphthene	78.3	2.0	μg/L	1700		76.0	0-200	1.25		
cenaphthylene	78.3 71.7	2.0	μg/L	100		78.3	40-140	2.51	25	
nthracene	71.7	2.0	μg/L	100		71.7	40-140	2.96	25	
enzo(g,h,i)perylene	68.9	2.0	μg/L σ//	100		77.4	40-140	2.24	25	
luoranthene	78.4	2.0	μg/L ug/ï	100		68.9	40-140	1.08	25	
uorene	75.1	2.0	μg/L μg/L	100		78.4	40-140	1.51	25	
Methylnaphthalene	68.1	2.0	μg/L μg/L	100		75.1	40-140	2.41	25	
aphthalene	71.6	2.0	μg/L μg/L	100		68.1	40-140	4.91	25	
nenanthrene	77.2	2.0	μg/L	100		71.6	40-140	6.80	25	
rrene	79.3	2.0	μg/L μg/L	100		77.2	40-140	2.16	25	
Decane	58.6	2.0	μg/L	100		79.3	40-140	1.47	25	
Docosane	73.8	2.0	μg/L μg/L	100 100		58.6	40-140	15.6	25	
Dodecane	65.4	2.0	րց/L μg/L	100		73.8	40-140	6.88	25	
Eicosane	69.5	2.0	μg/L	100		65.4	40-140	9.22	25	
Hexacosane	74.2	2.0	μg/L	100		69.5	40-140	6.57	25	
Hexadecane	70.9	2.0	μg/L	100		74.2	40-140	6.33	25	
Hexatriacontane	72.5	2.0	μg/L	100		70.9	40-140	4.13	25	
Nonadecane	70.1	2.0	μg/L	100		72.5	40-140	6.58	25	
Vonanc	50.5	2.0	μg/L	100		70.1	40-140	6.58	25	
Octacosane	71.9	2.0	μg/L	100		50.5 71.9	30-140	21.8	25	
Octadecane	70.8	2.0	μg/L	100		70.8	40-140	7.13	25	
Cetracosane	73.7	2.0	μg/L	100		70.8 73.7	40-140	6.24	25	
l'etradecane	68.7	2.0	μg/L	100		68.7	40-140	7.11	25	
riacontane	71.8	2.0	μg/L	100		71.8	40-140 40-140	0.561	25	
phthalene-aliphatic fraction	ND	2.0	μg/L	100		/1.0	40-140 0-5	6.42	25	
1ethylnaphthalene-aliphatic fraction	ND	2.0	μg/L	100			0-5 0-5			
rogate: Chlorooctadecane (COD)	68.2	17 PANGALINA	μg/L	100		68.2	40-140			
rogate: o-Terphenyl (OTP)	78.9		μg/L	100		78.9	40-140			
rogate: 2-Bromonaphthalene	108		μg/L	100		108	40-140			
rogate: 2-Fluorobiphenyl	124		μg/L	100		124	40-140			



### Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Resulț	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B233005 - MA VPH										110162
Blank (B233005-BLK1)				Prepared & A	Analyzed- 06	/11/19				
Unadjusted C5-C8 Aliphatics	ND	100	μg/L		maryzea. oo	11/17				
C5-C8 Aliphatics	ND	100	μg/L							
Unadjusted C9-C12 Aliphatics	ND	100	μg/L							
C9-C12 Aliphatics	ND	100	μg/L							
C9-C10 Aromatics	ND	100	μg/L							
Benzene	ND	1.0	μg/L							
Butylcyclohexane	ND ND	1.0	րց/L							
Decane	ND	1.0	μg/L							
Ethylbenzene	ND	1.0	μg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0								
2-Mcthylpentane		1.0	μg/L							
Vaphthalene	ND		μg/L							
Nonane	ND	5.0	μg/L							
entane	ND	1.0	μg/L							
Toluene	ND	1.0	μg/L							
,2,4-Trimethylbenzene	ND	1.0	μg/L							
,2,4-Trimethylpentane	ND	1.0	μg/L							
n+p Xylene	ND	1.0	μg/L							
-Xylene	ND	2.0	μg/L							
	ND	1.0	μg/L							
rrogate: 2,5-Dibromotoluene (FID)	47.9		μg/L	40.0		120	70-130	***************************************	* *****	
rrogate: 2,5-Dibromotoluene (PID)	47.3		μg/L	40.0		118	70-130			
.CS (B233005-BS1)				Decree d C. A						
enzene	47.0	10		Prepared & A	nalyzed: 06/					
utylcyclohexane	47.8	1.0	μg/L	50.0		95.5	70-130			
ecane	58.6	1.0	μg/L	50.0		117	70-130			
thylbenzene	48.3	1.0	μg/L	50.0		96.6	70-130			
lethyl tert-Butyl Ether (MTBE)	47.7	1.0	μg/L	50.0		95.3	70-130			
Methylpentane	44.5	1.0	μg/L	50.0		89.0	70-130			
aphthalene	52.5	1.0	μg/ <b>L</b>	50.0		105	70-130			
onane	46.3	5.0	μg/L	50.0		92.5	70-130			
entane	56.2	1.0	μg/L	50.0		112	30-130			
bluene	49.6	1.0	μg/L	50.0		99.1	70-130			
2,4-Trimethylbenzene	47.6	1.0	μg/L	50.0		95.1	70-130			
2,4-Trimethylpenzene 2,4-Trimethylpentane	47.7	1.0	μg/L	50.0		95.3	70-130			
	47.8	1.0	μg/L	50.0		95.5	70-130			
+p Xylene Yylene	96.7	2.0	μg/L	100		96.7	70-130			
Xylene	48.0	1.0	μg/L	50.0		96.1	70-130			
rrogate: 2,5-Dibromotoluene (FID)	46.7		μg/L	40.0		117	70-130			
rrogate: 2,5-Dibromotoluene (PID)	45.3		μg/L	40.0		113	70-130			
CS Dup (B233005-BSD1)			_	Prepared & Aı	udunadi ne ii		100			
nzene	AC 1	1.0			atyzed: U6/1				· · · · · · · · · · · · · · · · · · ·	
tylcyclohexane	46.1		μg/L σ/I	50.0		92.3	70-130	3.49	25	
cane	56.2	1.0	μg/L	50.0		112	70-130	4.04	25	
nylbenzene	45.7	1.0	μg/L.	50.0		91.5	70-130	5.44	25	
thyl tert-Butyl Ether (MTBE)	46.3	1.0	μg/L	50.0		92.5	70-130	2.98	25	
Acthylpentane	42.9	1.0	μg/L	50.0		85.8	70-130	3.63	25	
phthalene	50.1	1.0	μg/L -	50.0		100	70-130	4.62	25	
ane	44.2	5.0	μg/L	50.0		88.4	70-130	4.53	25	
	54.6	1.0	μg/L	50.0		109	30-130	2.96	25	
itane	47.1	0.1	μg/L	50.0		94.2	70-130	5.10	25	
uene	46.1	1.0	μg/L	50.0		92.2	70-130	3.14	25	
4-Trimethylbenzene	46.0	1.0	μg/L	50.0		92.0	70-130	3.51	25	



### Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B233005 - MA VPH										
LCS Dup (B233005-BSD1)				Prepared & A	Analuzadı 06	/11/10				
2,2,4-Trimethylpentane	45.8	1.0	μg/L	50.0	Analyzed: Ut					
m+p Xylene	93.3	2.0				91.5	70-130	4.26	25	
o-Xylene			μg/L	100		93.3	70-130	3.52	25	
	46.4	1.0	μg/L	50.0		92.9	70-130	3.37	25	
Surrogate: 2,5-Dibromotoluene (FID)	<i>37.9</i>		μg/L	40.0		94.8	70-130		·····	
Surrogate: 2,5-Dibromotoluene (PID)	37.6		μg/L	40.0		94.0	70-130			



### Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B233013 - SW-846 3005A Dissolved				<del></del>		T				.10103
Blank (B233013-BLK1)				Prepared: 06	/11/19 Anals	/zcd: 06/13/1	9		···	
Antimony	ND	1.0	μg/L	·						
Arsenic	ND	0.80	μg/L							
arium	ND	10	μg/L							
cryllium	ND	0.40	μg/L							
admium	ND	0.20	μg/L							
hromium	ND	1.0	μg/L							
cad	ND	0.50	μg/L							
ickel	ND	5.0	μg/L							
elenium	ND	5.0	μg/L							
ilver	ND	0.20	μg/L							
nallium	ND	0.20	μg/L							
anadium	ND	5.0	μg/L μg/L							
nc	ND	10	μg/L							
CS (B233013-BS1)				Prepared: 06/	11/19 Analy	zed: 06/13/10	1			
ntimony	531	10	μg/L	500						
senie	524	8.0	μg/L	500		106	80-120			
urium.	514	100	μg/L	500		105	80-120			
ryllium	464	4.0	μg/L			103	80-120			
admium	530	2.0	μg/L	500		92.9	80-120			
nromium	517	10	μg/L μg/L	500		106	80-120			
ad	529	5.0		500		103	80-120			
ckel	521	50	μg/L ug/I	500		106	80-120			
lenium	522	50	μg/L	500		104	80-120			
lver	521	2.0	μg/L	500		104	80-120			
allium		2.0	μg/L	500		104	80-120			
nadium	503		μg/L	500		101	80-120			
nc	513	50 100	μg/L σπ	500		103	80-120			
CS Dup (B233013-BSD1)	1050	100	μg/L	1000		105	80-120			
				Prepared: 06/1	1/19 Analyz	red: 06/13/19	1			
limony	528	10	μg/L	500		106	80-120	0.548	20	
senic	531	8.0	μg/L	500		106	80-120	1.50	20	
ium	510	100	μg/L	500		102	80-120	0.733	20	
ryllium	465	4.0	μg/L	500		92.9	80-120	0.0536	20	
lmium -	524	2.0	μg/L	500		105	80-120	1.24	20	
romium	528	10	μg/L	500		106	80-120	2.20	20	
đ	529	5.0	μg/L	500		106	80-120	0.0635	20	
kel	523	50	μg/L	500		105	80-120	0.511	20	
enium	528	50	μg/L	500		106	80-120	1.20	20	
er	520	2.0	μg/L	500		104	80-120	0.131		
Ilium	505	2.0	μg/L	500		101	80-120		20	
adium	517	50	μg/L	500		101		0.486	20	
2	1060	100	μg/L	1000		103	80-120 80-120	0.722 0.810	20 20	



### Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Notes
Batch B233013 - SW-846 3005A Dissolved			***************************************				w		LIMIK	Notes
Duplicate (B233013-DUP1)	Sou	rce: 19F0402-	01	Prepared: 06	/11/19 Analy:	zed: 06/13/1	0			
Antimony	ND	1.0	μg/L	•	ND			NC		
Arsenic	ND	0.80	μg/L		ND			NC	20	
Barium	26.3	10	μg/L		25.9				20	
Beryllium	ND	0.40	μg/L		ND			1.86	20	
Cadmium	ND	0.20	μg/L		ND			NC	20	
Chromium	7.32	1.0	μg/L		7.00			NC	20	
Lcad	3.37	0.50	μg/L					4.43	20	
Nickel	ND	5.0	μg/L		3.27			3.08	20	
Selenium	ND	5.0	μg/L		ND			NC	20	
Silver	ND	0.20	μg/L		ND			NC	20	
Thallium	ND	0.20	μg/L		ND			NC	20	
/anadium	6.36	5.0	μg/L		ND			NC	20	
line	13.8	10	μg/L		5.74			10.2	20	
• · · · · · · · · · · · · · · · · · · ·	15.0		μgL		15.3			10.3	20	
fatrix Spike (B233013-MS1)	Sour	ce: 19F0402-0	)1	Prepared: 06/	11/19 Analyz	cd: 06/13/1	9			
Antimony	513	10	μg/L	500	ND	103	75-125			
Arsenic	528	8.0	μg/L	500	ND	106	75-125			
arium	536	100	μg/L	500	25.9	102	75-125			
eryllium	528	4.0	μg/L	500	ND	106	75-125			
admium	516	2.0	μg/L	500	ND	103	75-125 75-125			
hromium	534	10	μg/L	500	7.00	105	75-125 75-125			
ead	534	5.0	μg/L	500	3.27	106	75-125			
lickel	540	50	μg/L	500	ND	108	75-125 75-125			
elenium	527	50	μg/L	500	ND	105	75-125 75-125			
liver	479	2.0	μg/L	500	ND	95.8		-		
hallium	507	2.0	μg/L	500	ND ND	101	75-125 75-125			
anadium	526	50	μg/L	500	ND ND	101	75-125 75-125			
inc	1080	100	μg/L	1000	ND	103	75-125 75-125			
atch B233055 - SW-846 7470A Dissolved										
ank (B233055-BLK1)			<del></del>	Prepared: 06/1	1/10 Anal	J. 06/12/16				
ercury	ND	0.00010	mg/L	Prepared: 06/1	III Anaiyzo	a: 06/12/19	·			
CS (B233055-BS1)				Prepared: 06/1	I/IQ Analus	M- 06/12/14	,			
rcury	0.00376	0.00010	mg/L	0.00400	Aliaiyze	94.1	80-120		***************************************	
S Dup (B233055-BSD1)				Prepared: 06/1	1/19 Analyza					
reury	0.00372	0.00010	mg/L	0.00400		93.0	80-120	1.16	20	



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 BREAKDOWN REPORT

Lab Sample ID:	S037025-PEM1	Analyzed: 06/11/2019
Column Number:	1	
Analyte	% Breakdown	•
4,4'-DDT [1]	0.52	
Endrin [1]	1.66	
Columa Number:	2	
Analyte	% Breakdown	
4,4'-DDT [2]	0.59	
Endrin [2]	1.86	

#### BREAKDOWN REPORT

Lab Sample ID:	S037025-PEM2	Analyzed:	06/12/2019
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	0.67		
Endrin [1]	2.18		
Column Number:	2		
Column Number: Analyte	2 % Breakdown		

#### BREAKDOWN REPORT

Lab Sample ID:	S037025-PEM3	Analyzed:	06/12/2019
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	0.81		
Endrin [1]	2.76		



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 BREAKDOWN REPORT

S037025-PEM3	Analyzed: 06/12/2019	
2		
% Breakdown		
0.86		
2.99		
	2 % Breakdown 0.86	2 % Breakdown 0.86



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Lab Sample ID:	19F0402-03		Date(s) Analyzed:	06/11/2019	06/1:	2/2019
Instrument ID (1):	ECD6A		Instrument ID (2):	ECD6B	3	
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT W	INDOW	CONCENTRATION	%RPD
		.,,	FROM	то	CONCENTRATION	%RPD
4,4'-DDT	11	7.520	0.000	0.000	0.052	
	2	7.563	0.000	0.000	0.057	9.2
alpha-BHC	1	5.482	0.000	0.000	5.2	
	2	5.417	0.000	0.000	5.2	0.0
beta-BHC	1	5.739	0.000	0.000	2.0	
	2	5.688	0.000	0.000	1.7	16.2
Chlordane	1	0.000	0.000	0.000	2.4	·
	2	0.000	0.000	0.000	3.2	28.6
delta-BHC	1	5.856	0.000	0.000	13	
	2	5.877	0.000	0.000	14	7.4
Dieldrin	1	7.082	0.000	0.000	0.18	
	2	6.998	0.000	0.000	0.19	5.4
gamma-BHC (Lindane)	1	5.684	0.000	0.000	0.36	
	2	5.635	0.000	0.000	0.36	0.0
Heptachlor Epoxide	1	6.620	0.000	0.000	0.15	
	2	6.519	0.000	0.000	0.27	57.1



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

L	.cs	

SW-846 8082A

Lab Sample ID:	B232856-BS1		Date(s) Analyzed:	06/11/2019	06/11/	2019
Instrument ID (1):	ECD1		Instrument ID (2):	ECD1		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	0/ DDD
			FROM	TO	CONCENTRATION	%RPD
Aroclor-1016	11	0.000	0.000	0.000	0.50	
	2	0.000	0.000	0.000	0.50	0.0
Aroclor-1260	11	0.000	0.000	0.000	0.46	
	2	0.000	0.000	0.000	0.48	4.3



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS	Dup	

SW-846 8082A

Lab Sample ID:	B23285	6-BSD	1	_	Date(s) Analy	/zed:	06/11/2019	06/1	1/2019
Instrument ID (1):	ECD1				Instrument ID	(2):	EC	D1	
GC Column (1):		ID:	(r	nm)	GC Column (2	2):		ID:	(mm)
ANALY	TE (	COL	RT	F	RT WINDOW	CONC	ENTRATION	%RPD	

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	0/ DDD
			FROM	то	CONCENTRATION	%RPD
Aroclor-1016	1	0.000	0.000	0.000	0.50	
***************************************	2	0.000	0.000	0.000	0.51	2.0
Aroclor-1260	1	0.000	0.000	0.000	0.46	
	2	0.000	0.000	0.000	0.48	4.3



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS	

Lab Sample ID:	B232858-BS1		Date(s) Analyzed:	06/12/2019	06/12/2019	
Instrument ID (1):	ECD6	_	Instrument ID (2):	ECD6		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (n	nm)

ANALYTE	COL	COL RT		INDOW	CONCENTRATION	
	- 002	N <sub>1</sub>	FROM	ТО	CONCENTRATION	%RPD
4,4'-DDD	1	7.305	0.000	0.000	0.93	
	2	7.323	0.000	0.000	0.96	3.2
4,4'-DDE	1	6.862	0.000	0.000	0.95	
	2	6.888	0.000	0.000	0.94	1.1
4,4'-DDT	. 1	7.519	0.000	0.000	0.95	
	2	7.563	0.000	0.000	0.91	5.4
Aldrin	1	6.199	0.000	0.000	0.91	
	2	6.127	0.000	0.000	0.90	1.1
alpha-BHC	1	5.481	0.000	0.000	0.91	·
	2	5.417	0.000	0.000	0.91	0.0
beta-BHC	1	5.738	0.000	0.000	0.88	
	2	5.689	0.000	0.000	0.85	3.5
delta-BHC	1	5.855	0.000	0.000	0.63	
	2	5.876	0.000	0.000	0.67	6.2
Dieldrin	11	7.081	0.000	0.000	0.93	
	2	7.000	0.000	0.000	0.92	1.1
Endosulfan I	1	6.905	0.000	0.000	0.85	
	2	6.799	0.000	0.000	0.87	2.3
Endosulfan II	1	7.423	0.000	0.000	0.80	
	2	7.388	0.000	0.000	0.79	1.3
Endosulfan Sulfate	1	8.071	0.000	0.000	0.93	
	2	7.867	0.000	0.000	0.91	2.2
Endrin	1	7.255	0.000	0.000	0.94	
	2	7.226	0.000	0.000	0.91	3.2
Endrin Ketone	1	8.260	0.000	0.000	0.90	
	2	8.242	0.000	0.000	0.95	5.4
gamma-BHC (Lindane)	1	5.683	0.000	0.000	0.91	
	2	5.635	0.000	0.000	0.92	1.1
Heptachlor	1	5.995	0.000	0.000	0.68	***
	2	5.914	0.000	0.000	0.91	28.9
Heptachlor Epoxide	1	6.621	0.000	0.000	0.89	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

 	_
LCS	

Lab Sample ID:	B232858-BS1		Date(s) Analyzed:	06/12/2019	06/12/2	019
Instrument ID (1):	ECD6		Instrument ID (2):	ECD6		-
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	. RT WI	NDOW	CONCENTRATION	%RPD
			FROM	то	CONCENTRATION	
	2	6.521	0.000	0.000	0.87	2.3
Hexachlorobenzene	1	5.374	0.000	0.000	1.0	
***	2	5.330	0.000	0.000	0.91	9.4
Methoxychlor	1	7.900	0.000	0.000	0.90	
	2	8.098	0.000	0.000	0.90	0.0



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS_Dup	

Lab Sample ID:	B232858-BSD1		Date(s) Analyzed:	06/12/2019	06/12/201	9
Instrument ID (1):	ECD6		Instrument ID (2):	ECD6		<del></del>
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANIA1365		T	DTW	INDOW		
ANALYTE	COL	RT	FROM	TO	CONCENTRATION	%RPD
4,4'-DDD	1	7.306	0.000	0.000	0.05	
	2	7.323	0.000	0.000	0.95	4 4
4,4'-DDE	1	6.862	0.000	0.000	0.96	1.1
	2	6.890	0.000	0.000	0.95	1 1
4,4'-DDT	1	7.519	0.000	0.000		1.1
	2	7.564	0.000	0.000	0.97	
Aldrin	1	6.200	0.000	0.000		5.3
**************************************	2	6.128	0.000	0.000	0.93	
alpha-BHC	1	5.483	0.000	0.000		3.3
	2	5.417	0.000	0.000	0.92	2.2
beta-BHC	1	5.739	0.000	0.000	0.87	2.2
	2	5.690	0.000	0.000	0.87	7.1
delta-BHC	1	5.856	0,000	0.000	0.49	7.1
	2	5.876	0.000	0.000	0.49	4.0
Dieldrin	1	7.082	0.000	0.000	0.94	4.0
	2	7.001	0.000	0.000	0.92	2.2
Endosulfan I	1	6.906	0.000	0.000	0.83	
	2	6.800	0.000	0.000	0.83	0.0
Endosulfan II	1	7.424	0.000	0.000	0.79	0.0
	2	7.389	0.000	0.000	0.79	2.6
Endosulfan Sulfate	1	8.072	0.000	0.000	0.94	2.0
	2	7.867	0.000	0.000	0.91	3.2
Endrin	1	7.255	0.000	0.000	0.95	3.2
	2	7.227	0.000	0.000	0.91	4.3
Endrin Ketone	1	8.260	0.000	0.000	0.92	7.3
<u> </u>	2	8.243	0.000	0.000	1.0	8.3
gamma-BHC (Lindane)	1	5.684	0.000	0.000	0.92	0.3
	2	5.636	0.000	0.000	0.89	3.3
Heptachlor	1	5.996	0.000	0.000		ა.ა
	2	5.915	0.000	0.000	0.70	25.0
Heptachlor Epoxide	1	6.622	0.000	0.000	0.90	20.0



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Sample ID:	B232858-BSD1		Date(s) Analyzed:	06/12/2019	06/12/	2019
Instrument ID (1):	ECD6		Instrument ID (2):	ECD6		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO	CONCENTRATION	%KPD
	2	6.522	0.000	0.000	0.87	4.5
Hexachlorobenzene	1	5.376	0.000	0.000	1.0	
	2	5.331	0.000	0.000	0.91	9.4
Methoxychlor	1	7.900	0.000	0.000	0.91	
	2	8.098	0.000	0.000	0.91	1.1



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

SW-846 8151A

Lab Sample ID:	B232959-BS1		Date(s) Analyzed:	06/13/2019	06/13	/2019
Instrument ID (1):	ECD 8	<del>_</del>	Instrument ID (2):	ECD 8		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	0/ DDD
			FROM	TO	CONCENTRATION	%RPD
2,4,5-T	1	13.813	0.000	0.000	0.228	
	2	13.926	0.000	0.000	0.232	0.9
2,4,5-TP (Silvex)	111	13.236	0,000	0.000	0.223	
	2	13.131	0.000	0.000	0.215	2.3
2,4-D	1	11.562	0.000	0.000	2.04	
	2	11.535	0.000	0.000	2.16	7.7
2,4-DB	1	14.946	0.000	0.000	2.09	
	2	14.993	0.000	0.000	2.17	3.3
Dalapon	1	3.730	0.000	0.000	4.05	
	2	3.397	0.000	0.000	4.06	1.0
Dicamba	1	9.704	0.000	0.000	0.301	
	2	9.582	0.000	0.000	0.208	36.2
Dichloroprop	1	11,109	0.000	0.000	2.17	
	2	10.927	0.000	0.000	2.20	0.0
Dinoseb	1	16.825	0.000	0.000	0.943	
	2	15.576	0.000	0.000	0.940	0.0
MCPA	1	10.431	0.000	0.000	188	
	2	10.324	0.000	0.000	200	5.1
MCPP	1	10.146	0.000	0.000	204	
	2	9.895	0.000	0.000	203	1.5



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS_Dup	

SW-846 8151A

Lab Sample ID:	B232959-BSD1		Date(s) Analyzed:	06/13/2019	06/13	/2019
Instrument ID (1):	ECD 8	_	Instrument ID (2):	ECD 8		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	%RPD
			FROM	то	CONCENTRATION	MILD
2,4,5-T	1	13.815	0.000	0.000	0.202	
	2	13.926	0.000	0.000	0.223	10.9
2,4,5-TP (Silvex)	1	13.235	0.000	0.000	0.224	
	2	13.132	0.000	0.000	0.220	0.0
2,4-D	1	11.562	0.000	0.000	2.08	
	2	11.535	0.000	0.000	2.20	4.7
2,4-DB	1	14.947	0.000	0.000	2.16	
	2	14.993	0.000	0.000	2.34	6.2
Dalapon	1	3.731	0.000	0.000	4.00	
	2	3.398	0.000	0.000	4.03	0.7
Dicamba	1	9.705	0.000	0.000	0.334	
	2	9.581	0.000	0.000	0.213	43.1
Dichloroprop	1	11.110	0.000	0.000	2.22	
	2	10.927	0.000	0.000	2.26	2.7
Dinoseb	1	16.826	0.000	0.000	0.931	
	2	15.577	0.000	0.000	0.947	1.8
MCPA	1	10.431	0.000	0.000	196	
	2	10.326	0.000	0.000	203	1.5
MCPP	1	10.147	0.000	0.000	216	
	2	9.896	0.000	0.000	206	6.6



#### FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
t	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-14	Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
P-02	Sample RPD between primary and confirmatory analysis exceeded 40%. Per EPA method 8000, the lower value was reported due to obvious chromatographic interference on the column with the higher result.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-07	Elevated reporting limit based on lowest point in calibration.  MA CAM reporting limit not met.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side.  Data validation is not affected since sample result was "not detected" for this compound.



Certified Analyses included in this Report

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

#### CERTIFICATIONS

Analyte	Certifications
MADEP-EPH-04-1.1 in Soil	
C9-C18 Aliphatics	CT,NC,ME,NH-P
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Accnaphthylene	CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
MADEP-EPH-04-1.1 in Water	
C9-C18 Aliphatics	CTN10.1 T 1111 T
C19-C36 Aliphatics	CT,NC,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,ME,NH-P
C11-C22 Aromatics	CT,NC,ME,NH-P
Acenaphthene	CT,NC,ME,NH-P
Acenaphthylene	CT,NC,ME,NH-P CT,NC,ME,NH-P
Anthracene	CT,NC,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,ME,NH-P
Fluoranthene	CT,NC,ME,NH-P
Fluorene	CT,NC,ME
2-Methylnaphthalene	CT,NC
Naphthalene	CT,NC,ME,NH-P
Phenanthrene	CT,NC,ME,NH-P
Pyrene	CT,NC,ME,NH-P
MADEP-VPH-Feb 2018 Rev 2.1 in Water	
Unadjusted C5-C8 Aliphatics	CTNC ME NILLD
C5-C8 Aliphatics	CTNC,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,ME,NH-P CT,NC,ME,NH-P
C9-C12 Aliphatics	CT,NC,ME,NH-P
C9-C10 Aromatics	CT,NC,ME,NH-P
Benzene	CT,NC,ME,NH-P
Ethylbenzene	CT,NC,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,ME,NH-P
Naphthalene	CT,NC,ME,NH-P
Toluene	CT,NC,ME,NH-P
m+p Xylene	CT,NC,ME,NH-P
9-Xylene	CT,NC,ME,NH-P
W-846 6020B in Water	
	CTNUL NAME AND ADDRESS OF THE ADDRES
Antimony Arsenic	CT,NH,NY,ME,VA,NC
Barium	CT,NH,NY,NC,ME,VA
- manual	MA,NY,CT,NC,NH,ME,VA



#### CERTIFICATIONS

#### Certified Analyses included in this Report

Analyte	Certifications	
SW-846 6020B in Water		
Beryllium	CTNII NIVAICAR VA	
Cadmium	CT,NH,NY,NC,ME,VA	
Chromium	CT,NH,NY,NC,ME,VA	
Lead	CT,NH,NY,NC,ME,VA	
Nickel	CT,NH,NY,NC,ME,VA	
Selenjum	CT,NH,NY,NC,ME,VA	
Silver	CT,NH,NY,NC,ME,VA	
Thallium	CT,NC,NH,NY,ME,VA	
	CT,NH,NY,NC,ME,VA	
Vanadium	CT,NH,NY,NC,ME,VA	
Zinc	CT,NH,NY,NC,ME,VA	
SW-846 7470A in Water		
Mercury	CT,NH,NY,NC,ME,VA	
SW-846 8081B in Water		
Aldrin	CT,NC,NH,NY,ME,VA	
Aldrin [2C]	CT,NC,NH,NY,ME,VA	
alpha-BHC	CT,NC,NH,NY,ME,VA	
alpha-BHC [2C]	CT,NC,NH,NY,ME,VA	
beta-BHC	CT,NC,NH,NY,ME,VA	
beta-BHC [2C]	CT,NC,NH,NY,ME,VA	
delta-BHC	CT,NC,NH,NY,ME,VA	
delta-BHC [2C]	CT,NC,NH,NY,ME,VA	
gamma-BHC (Lindane)	CT,NC,NH,NY,ME,VA	
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY,ME,VA	
Chlordane	CT,NC,NH,NY,ME,VA	
Chlordane [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDD	CT,NC,NH,NY,ME,VA	
4,4'-DDD [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDE	CT,NC,NH,NY,ME,VA	
4,4'-DDE [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDT	CT,NC,NH,NY,ME,VA	
4,4'-DDT [2C]	CT,NC,NH,NY,ME,VA	
Dieldrin	CT,NC,NH,NY,ME,VA	
Dieldrin [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan I	CT,NC,NH,NY,ME,VA	
Endosulfan I [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan II	CT,NC,NH,NY,ME,VA	
Endosulfan II [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan Sulfate	CT,NC,NH,NY,ME,VA	
Endosulfan Sulfate [2C]	CT,NC,NH,NY,ME,VA	
Endrin	CT,NC,NH,NY,ME,VA	
Endrin (2C)	CT,NC,NH,NY,ME,VA	
Endrin Ketone	NC	
Endrin Ketone [2C]	NC	
Heptachlor	CT,NC,NH,NY,ME,VA	
Heptachlor [2C]	CT,NC,NH,NY,ME,VA	
Heptachlor Epoxide	CT,NC,NH.NY,ME,VA	



#### CERTIFICATIONS

Certified Ana	lyses i	ncluded	in	this	Report
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Analyte	Certifications	
SW-846 8081B in Water		
Heptachlor Epoxide [2C]	CT,NC,NH,NY,ME,VA	
Hexachlorobenzene	NC	
Hexachlorobenzene [2C]	NC	
Methoxychlor	CT,NC,NH,NY,ME,VA	
Methoxychlor [2C]	CT,NC,NH,NY,ME,VA	
SIV-846 8082A in Water		
Aroclor-1016	CT,NH,NY,NC,ME,VA	
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA	
Aroclor-1221	CT,NH,NY,NC,ME,VA	
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA	
Aroclor-1232	CT,NH,NY,NC,ME,VA	
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA	
Aroclor-1242	CT,NH,NY,NC,ME,VA	
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA	
Aroclor-1248	CT,NH,NY,NC,ME,VA	
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA	
Aroclor-1254	CT,NH,NY,NC,ME,VA	
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA	
Aroclor-1260	CT,NH,NY,NC,ME,VA	
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA	
Aroclor-1262	NH,NY,NC,ME,VA	
Aroclor-1262 [2C]	NH,NY,NC,ME,VA	
Aroclor-1268	NH,NY,NC,ME,VA	
Aroclor-1268 [2C]	NH,NY,NC,ME.VA	
SW-846 8151A in Water		
2,4-D	ME,NC,NH,CT,NY,VA	
2,4-D [2C]	ME,NC,NH,CT,NY,VA	
2,4-DB	ME,NC,NH,CT,NY,VA	
2,4-DB [2C]	ME,NC,NH,CT,NY,VA	
2,4,5-TP (Silvex)	ME,NC,NH,CT,NY,VA	
2,4,5-TP (Silvex) [2C]	ME,NC,NH,CT,NY,VA	
2,4,5-T	ME,NC,NH,CT,NY,VA	
2,4,5-T [2C]	ME,NC,NH,CT,NY,VA	
Dalapon	ME,NC,NH,CT,NY,VA	
Dalapon [2C]	ME,NC,NH,CT,NY,VA	
Dicamba	ME,NC,NH,CT,NY,VA	
Dicamba [2C]	ME,NC,NH,CT,NY,VA	
Dichloroprop	ME,NC,NH,CT,NY,VA	
Dichloroprop [2C]	ME,NC,NH,CT,NY,VA	
Dinoseb	ME,NC,NH,CT,NY,VA	
Dinoseb [2C]	ME,NC,NH,CT,NY,VA	
МСРА	NC,CT	
MCPA [2C]	NC,CT	
МСРР	NC,CT	
MCPP [2C]	NC,CT	
W-846 8260C in Water		



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

### Certified Analyses included in this Report

### CERTIFICATIONS

Analyte	Certifications
SW-846 8260C in Water	
Acetone	СТ, NH, NY, МЕ
tert-Amyl Methyl Ether (TAME)	NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	NY,ME
sec-Butylbenzene	NY,ME
tert-Butylbenzene	NY,ME
tert-Butyl Ethyl Ether (TBEE)	NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	СТ, NH, NY, МЕ
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	NY,ME
4-Chlorotoluene	NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NY,ME
1,3-Dichlorobenzene	СТ, NH, NY, МЕ
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NH,NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	СТ, NH, NY, МЕ
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Diisopropyl Ether (DIPE)	NH,NY,ME
Ethylbenzene	СТ, NH, NY, МЕ
Hexachlorobutadiene	CT,NH,NY,ME
-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	NY,ME
p-Isopropyltoluene (p-Cymene)	CT,NH,NY,ME
Methyl tert-Buryl Ether (MTBE)	CT,NH,NY,ME



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

### Certified Analyses included in this Report

### CERTIFICATIONS

Analyte	Certifications
SIV-846 8260C in Water	
Methylene Chloride	СТ, NH, NY, МЕ
4-Methyl-2-pentanone (MIBK)	СТ, NH, NY, МЕ
Naphthalene	NH,NY,ME
n-Propylbenzene	СТ, ИН, ИУ, МЕ
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	
Toluene	CT,NH,NY,ME
1,2,3-Trichlorobenzene	CT,NH,NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	СТ, NH, NY, МЕ
Trichlorofluoromethane (Freon 11)	СТ, NH, NY, МЕ
1,2,3-Trichloropropane	СТ, NH, NY, МЕ
	NH,NY,ME
1,2,4-Trimethylbenzene	NY,ME
1,3,5-Trimethylbenzene	NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
TH	

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	ML.	
AIHA	AIHA-LAP, LLC - ISO17025:2005	Number	Expires
MA	Massachusetts DEP	100033	03/1/2020
СТ		M-MA100	06/30/2019
NY	Connecticut Department of Publile Health	PH-0567	09/30/2019
	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	
NJ	New Jersey DEP		12/31/2019
FL	Florida Department of Health	MA007 NELAP	06/30/2019
VT	Vermont Department of Health Lead Laboratory	E871027 NELAP	06/30/2020
ME	State of Maine	LL015036	07/30/2019
		2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2019
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2019
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	
		23703	07/31/2019

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**Table of Contents** <sup>2</sup> <u>Preservation Codes:</u> | = Iced H = HCL M = Methanol N = Nitric Acid B = Sodium Bisulfate X = Sodium Hydroxide T = Sodium DW = Drinking Water GW = Ground Water WW = Waste Water <sup>3</sup> Container Codes: A = Amber Glass G = Glass P = Plastic ST = Sterile Thiosulfate O = Other (please define) S = Summa Canister O Fleid Filtered 0 = Other (please T = Tedlar Bag O = Other (please \_ of \_ Preservation Code Field Filtered S = Sulfuric Acid Matrix Codes Non Soxhlet O Lab to Filter Soxhlet O Lab to Filter PCB ONLY Container Code # of Containers SL = Sludge SOL = Solid A = Air S = Soil define) V = Vial NELAG ANT ARTALISTS THE SERVERS Con-test 39 Spruce Street East Longmeadow, MA 01028 Chromatogram AIHA-LAP, LLC ANALYSIS REQUESTED × Other Doc # 381 Rev 1\_03242017 METALS I ٥ × 2 8 2 9 2 29 X WRTA Ø × GW-1 Status per client 6/10/19 mmk I H 43 Œ × ĸ Х ىز HIGV 7 × × بد MCP Certification Form Required × MA MCP Required CT RCP Required C) Certification Form Required MWRA MA State DW Required 1,001 School MBTA × × × = = -3 LONS-LTANTS, COM CHAIN OF CUSTODY RECORD Ø S = Municipality Brownfield 10-Day 3-Day 4-Day EXCEL CLP Like Data Pkg Required: PWSID # http://www.conte Email To: LAS wall  $\square$ 띥 X Due Date: Government Pagy S format: Fax To #: 120% 050 Other: 1-Day 2 (33) .Day Federal City Project Entity 51/3/0 Field filtered CONSULTANTS THE 5 -Q E = Email: info@contestlabs.com 51 WALTHOW 子、ア Phone: 413-525-2332 19 1745 Fax: 413-525-6405 Ofte/Time: Date/Time Qate/Time: Date/Time: Date/Time: 60-5 m 69-7mw SES. BEAKER ORIVE MK 19F0402 DELABUL AE 100 Map 14 Mately BEAVER 830 Hunea Con-Test Quote Name/Number: Relinquisper by (signature) quished by: (signature) Ţ Con-Test Work Order# ved by: (signature) ved by: (signatur Project Location: Project Manager: Invoice Recipient: Project Number: Sampled By: Comments: Address:

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples\_\_\_\_\_



Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Received By CP Date LLT/2019 Time /745  How were the samples in Cooler T No Cooler On Ice T No Ice  Direct from Sampling Ambient Melted Ice  Were samples within By Gun# Actual Temp - 3.4 + 2.1/2  Were samples within By Blank # Actual Temp - 3.4 + 2.1/2  Was Custody Seal Intact? N/A Were Samples Tampered with? N/A Does Chain Agree With Samples? T Does Chain Agree With Samples? T Were samples Tempered with? N/A Does Chain Agree With Samples? T Are there broken/leaking/loose caps on any samples? T Sampler Name T Does Chain Agree With Samples? T Were samples received within holding time? T Analysis T Sampler Name T Does Chain Agree With Samples? T Collection Dates/Times T Does Chain Agree With Samples? T Were samples received within holding time? T Analysis T Collection Dates/Times T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Sampler Name T Does Chain Agree With Samples? T Collection Dates/Times T Doe	Client	CDW	Consultan	ite						
How were the samples received?  Direct from Sampling  Direct from Sampling  Direct from Sampling  Ambient  Melted Ice  Meter samples within  Temperature? 2-6°C  T  By Blank #  Actual Temp - 3.4 + 2.1/2  Actual Temp - 3.4 + 2.1/2  Was COC Relinquished?  Are there broken/leaking/loose caps on any samples?  Are there broken/leaking/loose caps on any samples?  Is COC in ink/ Legible?  T  Did COC Include all  Cilient  T  Analysis T  Sampler Name  T  Are Sample labels filled out and legible?  T  Are there Rushes?  Who was notified?  Who was notified?  Who was notified?  Who was notified?  Who was notified?  Who was notified?  Who was notified?  Who was notified?  Who was notified?  Who was notified?  T  Sample shade in the labels filled out and legible?  T  Are there Rushes?  F  Who was notified?  Who was notified?  Who was notified?  Who was notified?  T  Sample shade in the labels filled out and legible?  T  Actual Temp -  Actual Temp -  Actual Temp -  Actual Temp -  Actual Temp -  Actual Temp -  Actual Temp -  T  Actual Temp -  Actual Temp -  Actual Temp -  Actual Temp -  T  Actual Temp -  Actual Temp -  Actual Temp -  Actual Temp -  T  Actual Temp -  Actual Temp -  Actual Temp -  Actual Temp -  T  Actual Temp -  T  Actual Temp -  Actual Temp -  Actual Temp -  T  Actual Temp -  Actual Temp -  T  Actual Temp	Recei	ived By	CAP		Date	1017/	2019	Time	1745	
Direct from Sampling	How were	the samples	In Cooler	7	- No Coolo			-		<del></del>
Were samples within Temperature? 2-6°C T By Blank # Actual Temp - Was Custody Seal Intact? Was COC Relinquished? Are there broken/leaking/loose caps on any samples? Are there broken/leaking/loose caps on any samples? By COC in link / Legible? T Did COC include all Client pertinent Information? Are Sample labels filled out and legible? Are there Lab to Filters? Are there Pashes? Who was notified? Are there Rushes? Who was notified? Are there Rushes? Who was notified? Are there Rushes? Who was notified? Analysis			000.01		- MO COOISI			<u> </u>	•	
Temperature? 2-6°C			Direct from Sam	, •		=			•	
Was Custody Seal Intact?  Was COC Relinquished?  Are there broken/leaking/loose caps on any samples?  Scoc in ink/ Legible?  Tobic CoC include all Client Tobic Are Sample labels filled out and legible?  Are Sample labels filled out and legible?  Are there Lab to Filters?  Are there Rushes?  In the Headspace where applicable?  In the Headspace where app				By Gun#	4	_	Actual Tem	p- 3.4+	2.6	
Was Custody Seal Intact? Was COC Relinquished? Are there broken/leaking/loose caps on any samples?  Are there broken/leaking/loose caps on any samples?  Is COC in ink/ Legible?  Did COC include all Client T Analysis T Sampler Name T T Analysis T Collection Dates/Times T Analysis Analysis T Collection Dates/Times T Who was notified? Wh	· · · · · · · · · · · · · · · · · · ·			By Blank #			Actual Tem	D -		-
Are there broken/leaking/loose caps on any samples?  Are there broken/leaking/loose caps on any samples?  Is COC in ink/ Legible?  T				<del>-</del>		- ere Sample			2//0	-
Are there broken/leaking/loose caps on any samples?  Bis COC in ink/ Legible?  Did COC include all Client T Analysis T Sampler Name T ID's T Collection Dates/Times T  Analysis T Sampler Name T ID's T Collection Dates/Times T  Analysis T Sampler Name T ID's T Collection Dates/Times T  Analysis T Sampler Name T ID's T Collection Dates/Times T ID's T				T	Doe	s Chain Ac	ree With Sa	mples?	_IV/A	-
Second Color   Ink/ Legible?   T	Are th	ere broken/l	leaking/loose caps	on any sam	ples?		,			-
Die OCC Include all Client T Analysis T Sampler Name T T Collection Dates/Times T Collection Dates/Times T T Sample Iabels filled out and legible? T Who was notified? I s splitting samples required? F On COC? F ON COC? F ON COC. F ON	Is COC in it	nk/ Legible?		•			_ ived within h	oldina time?	7	
pertinent Information? Project T ID's T Collection Dates/Times T Are Sample labels filled out and legible? T Are Sample labels filled out and legible? T Are there Lab to Filters? F Who was notified? Are there Rushes? F Who was notified? Are there Rushes? F Who was notified? Are there Short Holds? F Who was notified? Are there enough Volume? Are there Headspace where applicable? F Who was notified? Are there Headspace where applicable? F Who was notified? Are there Headspace where applicable? F Who was notified? Are there Headspace where applicable? F Who was notified? Are there Headspace where applicable? F Who was notified? Are there Headspace where applicable? Are there Headspace where applicable? Are there Headspace where applicable? Are there Headspace where applicable? Are there Headspace where applicable? Are there Rushes?  Are there Rushes?  Are there Rushes?  Who was notified?  Who was			Client	T	Analysis	$\tau$				<del>-</del>
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# PHASE I ENVIRONMENTAL SITE ASSESSMENT (ASTM E 1527-13)

City of Waltham 240 and 225-227 Beaver Street Waltham, Massachusetts 02452

July 2019

Prepared for:

City of Waltham 119 School Street Waltham, Massachusetts 02451

CDW Project #1830.00

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### **APPENDICES**

Appendix A: Environmental Database Report Executive Summary

Appendix B: Historic Aerial Photographs

Appendix C: Site Photographs



### I EXECUTIVE SUMMARY

CDW Consultants, Inc. (CDW) conducted an investigation of the properties located at 240 Beaver Street and 225-227 Beaver Street, in Waltham, Massachusetts (MA) (the "Site") on behalf of the City of Waltham. The Site includes two separate parcels of land totaling 58.7 acres. The Site contains one main 7,474 square foot administration building built in 1948 and two other support buildings and greenhouses. The properties are owned by the Commonwealth of Massachusetts and are listed on the City Assessor database under the following parcel identification numbers: R053 003 0001 and R053 003 0014 (240 Beaver Street) and R054 001 0001 (225-227 Beaver Street). Figure 1 depicts the Site locus. Figures 2 and 3 are Site Plans for 225-227 Beaver Street and 240 Beaver Street, respectively.

The Site investigation was conducted in general conformance with the ASTM International (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13) and the Massachusetts General Laws (MGL) Part I, Title II, Chapter 21E: Massachusetts Oil and Hazardous Material Release Prevention and Response Act.

On April 30, 2019, CDW personnel performed a Site reconnaissance to conduct a general visual inspection of the Site, observe the interior of the Site building, and document existing and observable uses of the Site and adjacent properties. A User Questionnaire was completed by Mr. Fred Leland, Maintenance for the facility.

The investigation conducted by CDW personnel included a review of available federal, state, and local environmental agency records to identify the presence or likely presence of Recognized Environmental Conditions (RECs), Historical Recognized Environmental Condition (HRECs) and Controlled Recognized Environmental Condition (CRECs).

The following CREC was identified during the assessment:

A CREC was identified on the northern Parcel 2 located at 225-227 Beaver Street where a portion of the parcel is identified as a Massachusetts Waste Disposal Site that has been assigned Release Tracking Number (RTN) 3-28049 for a release of heavy metals. A Class C-1 Response Action Outcome (RAO) was filed with Massachusetts Department of Environmental Protection (MassDEP) in November 2011 stating a condition of No Significant Risk of harm to human health exists for all current uses of the Disposal Site Area (DSA) and that it is infeasible to reach a Permanent Solution. The C1 RAO stated the disposal site boundary must be controlled with a fence. In 2011, a 6-foot tall chain link fence was installed around the DSA. A Periodic Review is conducted every five years. The last Periodic Review was conducted in July 2016 by Ramboll Environ.



The following HRECs were identified during the assessment:

- An HREC was identified on the southern Parcel 1 located at 240 Beaver Street where a portion of the parcel is listed as a Massachusetts Waste Disposal Site that has been assigned Release Tracking Number 3-28048 for a release of oil. A Class B-1 RAO was submitted to MassDEP on October 5, 2009 as assessments of the release have demonstrated that No Significant Risk exists as a result of the release and therefore site closure has been achieved.
- An HREC was identified on the southern Parcel 1 located at 240 Beaver Street where a portion of the parcel is listed as a Massachusetts Waste Disposal Site that has been assigned Release Tracking Number 3-28050 for a release condition of heavy metals in soil. A Class A-1 RAO was submitted to MassDEP on October 11, 2009 after soil remediation was completed, demonstrating that No Significant Risk exists as a result of the release and therefore site closure has been achieved.

Parcel 1 (240 Beaver Street) was the site of an upland fly ash research area, and Parcel 2 (225-227 Beaver Street) was the site of a wetlands fly ash research area. According to the maintenance foreman for Parcel 1, arsenic based pesticides and herbicides had been stored on-site, and used in the past inside the greenhouses.

An asbestos survey was beyond the scope of this assessment. However, it was previously documented in the document entitled, Waltham Experiment Station, Study of Existing Conditions, Development Potential, and Alternative Future Development Options. The section on the Regulated Building Materials Survey (RBMS) identified the following locations contained asbestos containing materials (ACM):

- Countertops and panels in the Parcel 1 Administration Building;
- Inside the laboratory, inside the sink countertops and panels in the Parcel 1 Gray Building;
- In the boiler smokestack in the Parcel 1 Boiler Building;
- In the linoleum floor located inside the Parcel 2 Farm House;
- In the asphalt roof shingles and transite panels within the Parcel 2 Main Barn;
- In the building materials within the Parcel 2 cow barn;
- In the building materials and shingles of Parcel 2 sheds 1 and 2.

No assessment of the potential for asbestos in soil was reviewed or performed as part of this scope or





#### DRAFT

### RELEASE ABATEMENT MEASURE PLAN & TSCA PERFORMANCE BASED CLEANUP PLAN 240 Beaver Street Waltham, MA

RTNs 3-36027 and 3-36180

Prepared for

City of Waltham 119 School Street Waltham, MA 02451

Prepared by CDW Consultants, Inc. 4 California Avenue Framingham, MA 01701

September 22, 2022

CDW Project No. 1830.20



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Figure 3: Release Abatement Measure Site Plan and Sampling Locations

#### **TABLES**

Table 1: Soil Headspace Screening Results
Table 2: Soil Precharacterization Results

#### **APPENDICES**

Appendix A: Soil Boring Logs and Well Construction Diagrams Appendix B: Laboratory Results and Chain of Custody Records

Appendix C: Copies of Public Notification Letters



#### INTRODUCTION

CDW Consultants, Inc. (CDW) has been retained by the City of Waltham to prepare a Release Abatement Measure (RAM) Plan and Toxic Substances Control Act (TSCA) Performance Based Cleanup Plan for the property located at 240 Beaver Street in Waltham, Massachusetts (the "Site"). The RAM addresses the excavation and off-Site disposal of up to 500 cubic yards of soil from an area contaminated with PCBs, TPH, pesticides and heavy metals. The Site was assigned Release Tracking Numbers (RTN) 3-36027 and 3-36180 by the Massachusetts Department of Environmental Protection (MassDEP) in December 2019 and April 2020, respectively. The purpose of this plan is to comply with 310 CMR 40.0440 and 40.1067 of the Massachusetts Contingency Plan (MCP), which allows the implementation of accelerated response actions to reduce risks at certain disposal sites.

#### 1.0 RESPONSIBILITY

DCR is the potentially responsible party. The person assuming the responsibility for conducting the RAM is the following:

City of Waltham
Ms. Jeannette A. McCarthy
610 Main Street
Waltham, MA 02451
(781) 314-3000

The RAM Plan was prepared by the Licensed Site Professional below:

Brian J. Miller, LSP CDW Consultants, Inc. 4 California Avenue Framingham, MA 01701 508-875-2657

#### 2.0 SITE CONDITIONS AND HISTORY

The Site consists of an approximate ¼ acre portion of 240 Beaver Street located within a wooded area on the southern portion of the property. The disposal site is visually defined by a clearing in the wooded area, and where fill material was observed. Visual evidence of filling at the disposal Site showed cinder block, concrete, wood, glass, stone and plastic bottles. There was also evidence of historic fill as defined by the MCP. Soil with concentrations of lead, chromium and 4,4-DDT exceeding MCP Reportable Concentrations was found and is associated with MassDEP RTN 3-



36027. A smaller area of PCBs in soil exceeding RCs is also present within the larger area, and is associated with RTN 3-36180. A Site Plan is included as Figure 2.

The Site was recently acquired by the City of Waltham from the Commonwealth of Massachusetts. The property has been occupied by the University of Massachusetts Agriculture Experiment Station since the 1920's. Various tenants currently occupy the property.

#### 3.0 PREVIOUS ASSESSMENTS AND RESPONSE ACTIONS BY OTHERS

#### RTN 3-36027

A Phase I and II assessment was conducted at the Site by CDW in 2019 and 2020. Total chromium and lead were detected above MCP Reporting Category RCS-1 thresholds at boring location GP1-7 at a depth of 10-12 feet. 4,4-DDT was detected above MCP RCS-1 thresholds at a depth of 3-5 feet in GP1-7. Dissolved metals, pesticides and VOCs were detected in groundwater at the Site, but no MCP reporting thresholds were exceeded. This release was reported to MassDEP on December 4, 2019. Additional sampling was conducted in the area of GP1-7 in December 2019 to delineate the extent of contamination. Borings GP4-1 through GP4-9 were advanced and microscopic analysis for coal, coal ash and wood ash was conducted to identify if lead was the result of historic fill observed at the Site. As a result, the impacts of metals and pesticides appeared to be limited to GP1-7. Depth to groundwater ranges from approximately 10.82 to 12.69 feet with a southwesterly flow direction.

A Revised Release Notification Form (RNF) was submitted for this RTN on September 20, 2022, based on the results of soil precharacterization sampling. Concentrations of TPH, 4,4'-DDD, dieldrin, and hexachlorobenzene, which were not previously identified, exceeded applicable Reportable Concentrations for S-1 soil. The concentration of 4,4'-DDT identified was significantly higher than initially detected and, therefore, the RNF was revised with the higher concentration.

#### RTN 3-36180

This release was reported to MassDEP on April 14, 2020, due to the detection of PCBs in soil at location GP4-2 at a depth of 6-8 feet. This boring is located within the disposal site associated with RTN 3-36027. PCBs were detected at a maximum concentration of 66 mg/kg.

#### 4.0 RECENT INVESTIGATIONS

#### Soil Precharacterization Testing

On May 12, 2022, soil samples were collected with a direct push drill rig from depths between 2 and 10 feet to precharacterize soil for off-site disposal. Soil X Corp. was CDW's subcontractor that



performed the drilling. Nine (9) borings (GP3-1 through GP3-9) were completed to depths of 15 feet. The borings were completed in the fill area where soil excavation is anticipated, and soil samples were collected in five-foot increments in disposable plastic sleeves. Soil from the 2-10 foot depth of borings GP3-2, GP3-4, GP3-5, GP3-6, and GP3-8 were collected and composited into a single sample, Comp #1 (2-10ft). Groundwater was encountered at approximately 12 feet below grade during drilling.

Soils observed were brown and black sandy fill soils over gray, native silty fine to medium sand. The top two feet was observed to be brown and tan fill soils. The interval from approximately 2 to 10 feet was observed to be primarily black fin to medium sand with various solid wastes including brick, concrete, ash layers, coal, and some building materials of pasty caulking, glass and metal. A Site Plan showing sampling locations is included as Figure 2. Soil boring logs are included in Appendix A.

Soil samples were field screened for total organic volatiles (TOVs) with a MiniRae Lite® photoionization detector (PID) calibrated to an isobutylene standard. The results of PID screening showed levels of TOVs between 0.0 and 7.8 parts per million by volume (PPMV) in the samples screened. PID screening results are included in Table 1.

The composite sample was submitted to Contest Laboratories for analyses for Total Petroleum Hydrocarbons (TPH), Semi-Volatile Organic Compounds (SVOCs), Polychlorinated Biphenyls (PCBs), MCP14 metals, TCLP lead, pesticides, herbicides, pH, specific conductance, reactivity, and flashpoint. A discrete sample for VOC analysis was obtained from boring GP3-5 from a depth of 4-6 feet, because that sample exhibited the highest TOVs during field screening.

The results of the analyses are included in Table 2. The complete laboratory results are included in Appendix B.

#### 5.0 SURROUNDING RECEPTORS

There are approximately 50 full-time workers at the property that the Site is located on. These workers primarily work on other portions of the property, and not specifically within the Site boundaries. Potential future human receptors include children and adults. Camp Cedar Hill, a girl scout camp, is the only institution located in the area, but is located further than 500 feet north of the Site. Based on the 2010 census which lists the population density of Waltham as 4,763.3 people per square mile, the estimated residential population within ½ mile of the Site is approximately 3,739 people.

CDW obtained a Priority Resources Map from MassGIS. According to the map, there are no municipal water supply wells, no Interim Wellhead Protection Areas, Approved Zone II Areas, Sole Source Aquifers, Public Water Supplies, High-yield Potentially Productive Aquifers, Surface Water



Supply Zone A, Public Surface Water Supply Areas, certified or potential vernal pools, Natural Heritage and Endangered Species Program (NHESP) Estimated Habitat of Rare Wildlife, or Areas of Critical Environmental Concern (ACECs) located within one-half mile of the Site. The Site parcel is designated as Protected Open Space identified as "Waltham Agricultural Fields". The nearest surface water body is the Beaver Brook located approximately 150 feet south of the Site. The nearest mapped wetlands are located approximately 300 feet southeast of the Site.

The surrounding area is served by the Massachusetts Water Resource Authority (MWRA) municipal drinking water supply system. Drinking water is obtained from surface water reservoirs located in central and western Massachusetts. No water supply wells are known to be located within 500 feet of the Site.

#### 6.0 TSCA APPLICABILITY AND PERFORMANCE BASED PLAN

PCBs that enter the environment under certain circumstances are required to be managed under the Toxic Substances Control Act (TSCA) and the regulations found at 40 CFR 761. Based on the history of the Site as seen through aerial photographs, the PCBs found in soil were likely placed prior to 1970. TSCA's definition of PCB remediation waste includes "materials disposed of prior to April 18, 1978 that are currently at concentrations greater than 50 ppm regardless of the concentrations of the original spill." The soils at the Site meet this definition, therefore remediation is required to be in accordance with TSCA's regulations for PCB remediation waste.

Regulations for TSCA Performance Based Plans in accordance with 761.61(b) require that the area of concern be characterized sufficiently to delineate the extent of PCBs. While only 3 PCB samples have been analyzed (one composite and 2 grab), the area of fill has been visually defined based on 18 borings. Soil containing PCBs at concentrations equal to or above 1 mg/kg will be excavated and disposed at a TSCA approved facility. After excavation, confirmatory soil sampling will be conducted in accordance with TSCA Subpart O.

### 7.0 REQUIREMENTS FOR RELEASE ABATEMENT MEASURES

In accordance with 310 CMR 40.0441, Release Abatement Measures are intended to reduce risks at a disposal site and/or increase the cost effectiveness of response actions by allowing the implementation of certain accelerated remedial actions to stabilize, treat, control, minimize, or eliminate releases until such a time as a Permanent or Temporary Solution is achieved as described in 310 CMR 40.1000, or until Comprehensive Remedial Actions can be implemented, as described in 310 CMR 40.0800.



Elevated concentrations of lead, chromium, 4,4-DDT, and PCBs were detected in soil at the Site. To reduce overall Site risk, the provisions of this RAM Plan will guide the management of excavated soil. There currently no plans for development at the Site. It is estimated that approximately 500 cubic yards of soil may be excavated for off-site disposal.

#### 8.0 RELEASE ABATEMENT MEASURE - OBJECTIVES

The overall objective of the RAM is to excavate and dispose of soil with elevated concentrations of metals, pesticides and PCBs. The material is also known to contain a certain amount of concrete, glass, and wood. The specific objectives of the RAM are the following:

- Reduce risk to human health, safety, public welfare, and the environment from potential exposure to metals, pesticides, TPH and PCBs in soil.
- > Visually monitor for dust during soil excavation or other soil movement activities.
- Excavate, stockpile, and manage the off-site disposal of up to 500 cubic yards of soil.
- ➤ Conduct confirmatory soil sampling for EPH, pesticides, and metals, and PCBs in accordance with TSCA Subpart O.

#### 9.0 RELEASE ABATEMENT MEASURE - SPECIFIC PLANS

This RAM Plan addresses the excavation and off-site disposal of contaminated soil from the areas shown on Figures 2 and 3. The proposed RAM Plan will be conducted in accordance with a site-specific Health and Safety Plan. Managed soil will be handled to minimize excessive movement and to reduce the potential for air emissions. Confirmatory sampling will be conducted to evaluate post remedial risk to human health.

#### 9.1 Public Involvement

Written notifications will be provided to the City of Waltham Mayor's Office and the City of Waltham Health Department providing information on the purpose, nature, and expected duration of the RAM, and any personal protective equipment (PPE) that will be used. A copy of each of these notification letters is attached to this report as Appendix C.

#### 9.2 Site Security

The Site is located in the rear of the property in a relatively isolated wooded area. The Site will be secured with temporary construction fence, which will remain during the duration of the excavation activities. This area will continue to be off limits to the general public during construction activities.



### 9.3 Soil Excavation, Management and Disposal

The current and proposed RAM soil excavation activities involve Site preparation, soil excavation, stockpiling and loading into trucks or containers for off-site disposal or reuse. Level D PPE will be required for work within the excavation area.

Site preparation includes the clearing and preparation of the staging, excavation and loading areas, along with designated stockpile and staging areas.

The proposed area of excavation is approximately 50 feet by 30 feet by 9 feet deep. An estimated soil volume of up to 500 cubic yards is anticipated to be generated based on assessment and precharacterization soil results.

TCLP lead results did not show any exceedances of criteria that would classify the material as a hazardous waste. Soils slated for offsite disposal will be stockpiled on and covered with 10 mil polyethylene sheeting and restricted from public access within the fenced area. Loading will occur at the area of excavation where soil will be stockpiled and transported through the Site on existing gravel access roads. Because the soil is regulated under the MCP, a MassDEP Bill of Lading will be used to transport the soil to the appropriate facility.

Clean fill will be brought on-site to replace excavated contaminated soils. Equipment used at the Site that comes in contact with contaminated soil will be decontaminated with water and detergent prior to leaving the Site.

#### 9.4 Confirmatory Soil Sampling

After excavation, a sufficient number of confirmatory soil samples will be collected to evaluate the soil excavation. In accordance with Subpart O of TSCA, soil samples will be collected every 1.5 meters in a grid pattern. If feasible, and based on visual inspection after excavation, samples may be composited (5-point composites) and results evaluated to ensure that the allowable standard could not be mathematically exceeded.

#### 9.5 Excavation Dewatering

Depth to groundwater on the property was measured between 10.82 and 12.69 feet below grade. Depth to groundwater in well GP1-7MW located at the Site was measured at 12.69 feet below grade. The excavations are expected to terminate at a maximum depth of approximately 8-10 feet based on existing results. Therefore, dewatering is not anticipated. If required, temporary excavation dewatering will be localized and directed into a nearby excavation.



#### 10.0 SCHEDULE

Soil excavation and management will commence upon submittal of this RAM Plan to MassDEP. The duration of RAM activities including any soil excavation and stockpiling and off-site disposal is estimated to last up to two weeks. The RAM will be considered complete when all remediation waste has been removed from the Site.

If needed, a RAM Status Report will be submitted to MassDEP 120 days after initial submission of the RAM Plan and every six months thereafter, if needed. A RAM Completion Report will be submitted within 60 days of the completion of remedial actions at the Site.

#### 11.0 REMEDIATION WASTE

Remediation waste generated at the Site will consist of soil contaminated with metals, pesticides and PCBs. Up to 500 cubic yards of soil is anticipated to be generated as a result of soil excavation activities. Because the soil will managed under a Performance Based Cleanup Plan, disposal is limited to off-site disposal as a TSCA waste.

#### 12.0 ENVIRONMENTAL MONITORING PLAN

The following environmental monitoring plan has been implemented and is proposed to be continued at the Site during the course of the proposed RAM:

#### 12.1 Excavation Air Monitoring

Because SVOCs are expected, ambient air will be monitored every 15 minutes during heavy excavation with a PID using an 10.6 eV lamp. If a level of 10 ppmv of total organic vapors is met or exceeded in ambient air for a period of 15 minutes or longer (two consecutive readings), mitigative measures will be taken. These may include a temporary stop in work, or ventilation with fans to control vapors.

#### 12.2 Dust Monitoring

During implementation of this RAM Plan, short-term exposure to contaminated soil could occur primarily through dust generation while performing necessary excavation and materials handling tasks. To mitigate potential exposure by site workers and/or off-site receptors, engineering controls will be implemented to govern any activity that might disturb or expose contaminated soils. Dust suppression will occur throughout excavation activities to minimize potential off-site migration of airborne contaminants.



To mitigate dust emissions, the Construction Contractor will utilize the following specific measures:

- Wetting agents will be used regularly to control and suppress dust that may come from exposed excavations, chipping, sawing, etc.
- Gravel tracking pads and a wheel wash will be provided at the construction entrance.
- Construction practices will be monitored to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized and that any emissions of dust are minimal.

All soils, when transported upon public roadways, shall be covered to minimize fugitive dust, and where necessary, truck tire and undercarriage washing shall be employed to minimize tracking of soils onto public roadways.

#### 13.0 PERMITS & FEES

Since this RAM Plan is being prepared after Tier Classification for both Disposal Sites, no RAM Plan submittal fee is required. In accordance with 310 CMR 40.0443(2), subsequent to the receipt by MassDEP of a complete RAM Plan, approval is not required from MassDEP to conduct the RAM. The following permits will be obtained from public and private agencies prior to implementation of the RAM Plan:

#### 13.1 Dig-Safe

Utility clearance was requested from Dig-Safe at least 72 hours prior to initiating the RAM activities. Utility marking were incorporated in the Site Plan to show their locations. Entities that are not subscribers to the Dig-Safe network (such as the local water and sewer department) were contacted directly for utility marking.

#### 13.2 Trench Excavation Permit

If applicable, based on the size of the excavation, the excavation contractor will obtain a trench permit from the City of Waltham. The permit will be kept on the Site during excavation activities.

#### 14.0 GREENER CLEANUPS

In accordance with 310 CMR 40.0191(3)(e), Response Action Performance Standard (RAPS), the project work will incorporate relevant and feasible opportunities for achieving green remediation goals. These include:

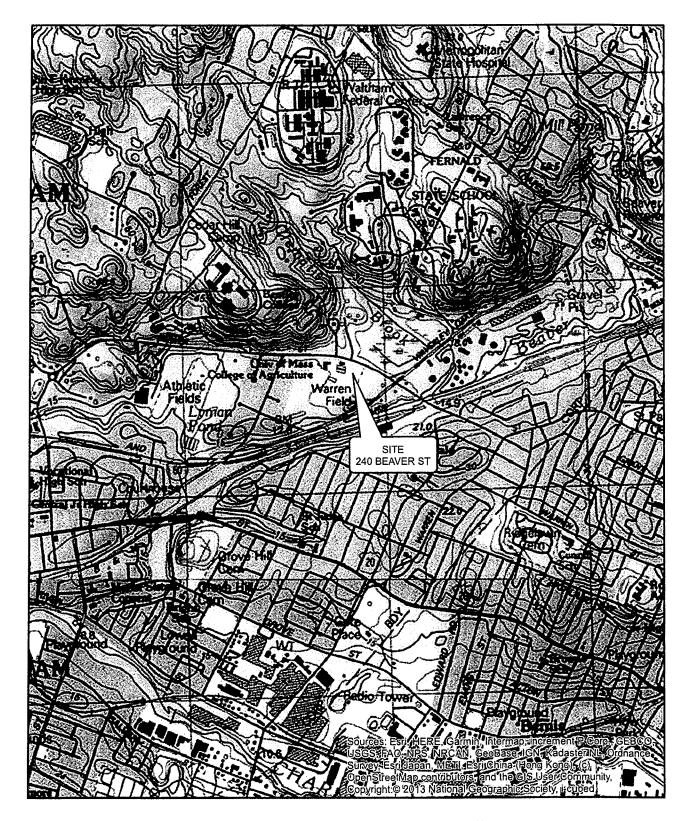
• Minimizing total energy use while maximizing the use of renewable energy;



- Minimizing emissions of greenhouse gases and other air pollutants;
- Minimizing water use and impacts to water resources;
- Reducing, reusing and recycling materials and waste; and
- Avoiding or reducing adverse impacts to ecosystems and land resources.

Soil excavation and off-site disposal was deemed the most feasible remedial alternative. Soil excavation and off-site disposal was limited to only those soils that reduce overall human health risk.

### **FIGURES**



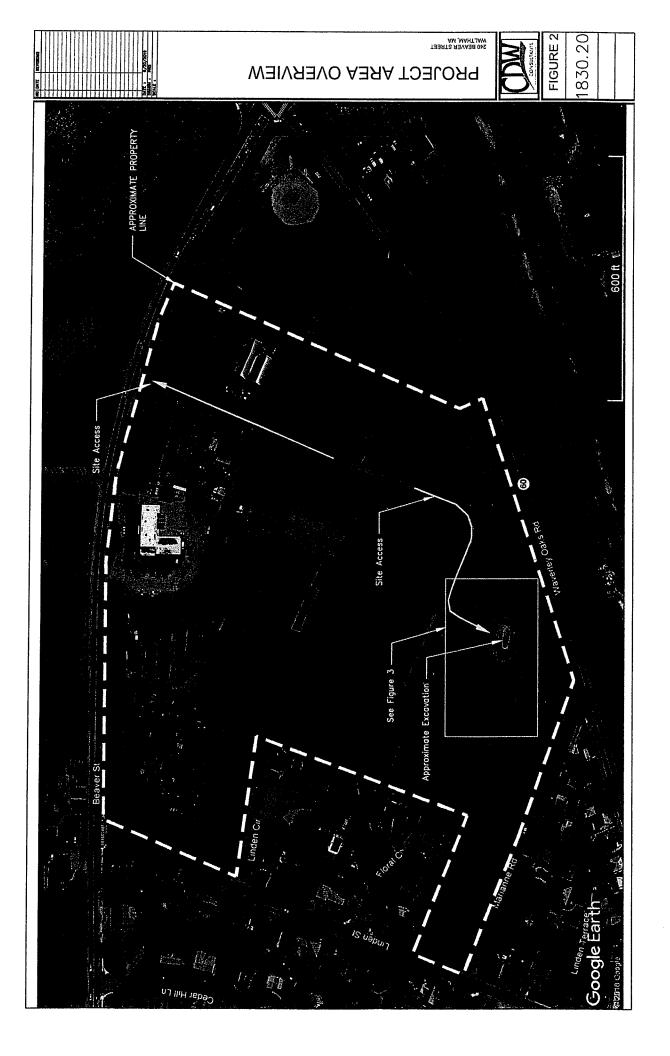
# CDW CONSULTANTS, INC.

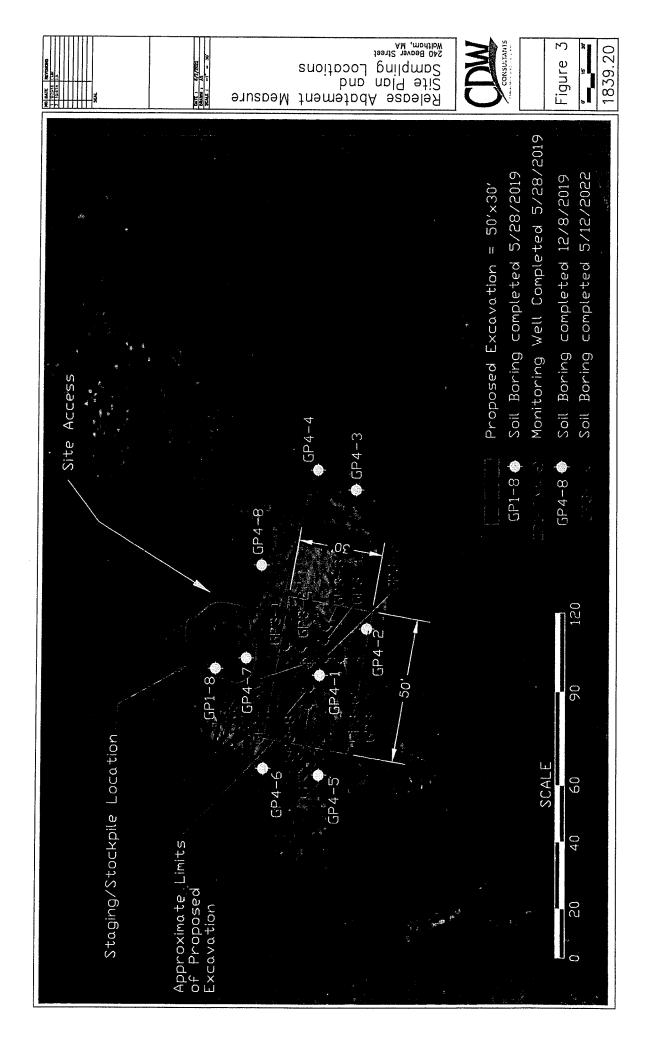


240 BEAVER STREET WALTHAM, MA

Figure 1 - Site Location Map







**TABLES** 

Table 1 Soil Headspace Screening Results - TOVs (ppmv) 240 Beaver St., Waltham, MA May 12, 2022

ID#	Depth	PID
GP3-1	0-2'	0.0
	2-4'	0.5
	4-6'	0.1
	6-8'	0.9
	8-10'	0.3
	10-12'	0.0
	12-14'	0.0
	14-15'	0.1
ID#	Depth	PID
GP3-2	0-2'	0.1
	2-4'	0
	4-6'	0.1
	6-8'	0.1
	8-10'	0.3
STAR PROPERTY.	10-12'	0.9
Transport A 1 To	12-14'	0.6
the state of the s	14-15'	0.1
ID#	Depth	PID
GP3-3	0-2'	0.1
	2-4'	1.4
	4-6'	2.2
	6-8'	0.9
	8-10'	0.1
	10-12'	0.0
	12-14'	0.0
	14-15'	0
ID#	Depth	PID
GP3-4	0-2'	0.1
3.0	2-4'	0.0
	4-6'	0.1
	6-8'	0.1
	8-10'	0.1
Additional State of the Control of t	10-12'	0.9
	12-14'	0.6
	14-15'	0.6
inu.		
ID# GP3-5	Depth 0.21	PID 0.1
ur3-3	0-2'	
	2-4'	3.7
	4-6'	7.8
	6-8'	4.2
	8-10'	0.3
	10-12'	0.80
3 14	12-14'	0.1
	14-15'	0.0

ID#	Depth	PID
GP3-6	0-2'	0.1
1.45	2-4'	2.2
	4-6'	0.5
	6-8'	0.1
	8-10'	0.3
	10-12'	0.9
	12-14'	0.6
3 3 3 3 3 3	14-15'	0.1
ID#	Depth	PID
GP3-7	0-2'	0.1
	2-4'	0.1
	4-6'	0.2
	6-8'	0.1
	8-10'	0.1
	10-12'	0.0
	12-14'	0.0
	14-15'	0
ID#	Depth	PID
ID# GP3-8	Depth 0-2'	PID 0.0
	0-2' 2-4' 4-6'	0.0
	0-2' 2-4'	0.0 0.0
	0-2' 2-4' 4-6'	0.0 0.0 1.2
	0-2' 2-4' 4-6' 6-8' 8-10' 10-12'	0.0 0.0 1.2 2.9
	0-2' 2-4' 4-6' 6-8' 8-10'	0.0 0.0 1.2 2.9 0.3
	0-2' 2-4' 4-6' 6-8' 8-10' 10-12'	0.0 0.0 1.2 2.9 0.3 0.4
GP3-8	0-2' 2-4' 4-6' 6-8' 8-10' 10-12' 12-14' 14-15' Depth	0.0 0.0 1.2 2.9 0.3 0.4 0.0
GP3-8	0-2' 2-4' 4-6' 6-8' 8-10' 10-12' 12-14' 14-15' Depth 0-2'	0.0 0.0 1.2 2.9 0.3 0.4 0.0 0.0 PID
GP3-8	0-2' 2-4' 4-6' 6-8' 8-10' 10-12' 12-14' 14-15' Depth	0.0 0.0 1.2 2.9 0.3 0.4 0.0 0.0
GP3-8	0-2' 2-4' 4-6' 6-8' 8-10' 10-12' 12-14' 14-15' Depth 0-2' 2-4' 4-6'	0.0 0.0 1.2 2.9 0.3 0.4 0.0 0.0 PID
GP3-8	0-2' 2-4' 4-6' 6-8' 8-10' 10-12' 12-14' 14-15' Depth 0-2' 2-4' 4-6' 6-8'	0.0 0.0 1.2 2.9 0.3 0.4 0.0 0.0 PID 0.0
GP3-8	0-2' 2-4' 4-6' 6-8' 8-10' 10-12' 12-14' 14-15' Depth 0-2' 2-4' 4-6' 6-8' 8-10'	0.0 0.0 1.2 2.9 0.3 0.4 0.0 0.0 PID 0.0 0.4 1.9
GP3-8	0-2' 2-4' 4-6' 6-8' 8-10' 10-12' 12-14' 14-15' Depth 0-2' 2-4' 4-6' 6-8' 8-10' 10-12'	0.0 0.0 1.2 2.9 0.3 0.4 0.0 0.0 PID 0.0 0.4 1.9 0.9
GP3-8	0-2' 2-4' 4-6' 6-8' 8-10' 10-12' 12-14' 14-15' Depth 0-2' 2-4' 4-6' 6-8' 8-10'	0.0 0.0 1.2 2.9 0.3 0.4 0.0 0.0 PID 0.0 0.4 1.9 0.9 0.3

#### Table 2 Soil Precharacterization Results 240 Beaver Street, Waltham May 12, 2022

Parameter	Concentrations (RCs) RCS-1	for In-state Lined Landfill	for in-state Unlined Landfill	Comp #1 (2-10ft)	GP 3-5 (4-6ft)
Sampling Date				5/12/2022 12:00:00 PM	5/12/2022 12:00:00 PM
Sample Depth SM 2540G (% Wt)			<del></del>	2-10 Feet	4-6 Feet
% Solids	~	_ ~	~	73.0	73.0
SM21-23 2510B Modified (µmhos/cm) SPECIFIC CONDUCTANCE	~	8000	4000	9,7	NT
5W-846 1010A-B (*F)		8000	4000	3.7	INI
EASHPOINT	~	~	>140 °F	> 212 °F	NT
W-846 6010D (mg/Kg dry) Metals Digestion ANTIMONY	20			ND (2.2)	NT
ARSENIC	20	40	40	9,8	NT
BARIUM BERYLLIUM	1000 90			82 0.36	NT NT
ADMIUM	70	80	30 -	0.36	NT NT
HROMIUM	100	1000	1000	24	NT
EAD VICKEL	200 600	2000	1000	170 24	NT NT
ELENIUM	400	j i		ND (4.4)	NT
ILVER	100			ND (0.44)	NT
HALLIUM /ANADIUM	8 400			ND (2.2) 160	NT NT
INC	1000			160	NTNT
W-846 7471B (mg/Kg dry) Metals Digestion MERCURY	20	10	10	0.40	NT
W-846 6010D (mg/Kg dry) Metals Digestion				0.40	
CLP Lead W-846 8081B (mg/Kg dry)	. ~	5	5	0.9	NT
W-846 80818 (mg/kg dry) LDRIN	0.08			ND (1.4) *	NT
LPHA-BHC	50			ND (1.4)	NT
ETA-BHC ELTA-BHC	10 10		a.	ND (1.4)	NT NT
AMMA-BHC (LINDANE)	0.003			ND (1.4) ND (0.55) *	NT
HLORDANE	5		·	ND (5.5) *	NT
,4'-DDD ,4'-DDE	8 6			34 3.2	NT NT
,4'-DDT	6			1400	NT
IELDRIN	0.08			ः <b>7.8</b>	NT
NDOSULFAN I NDOSULFAN II	0.5 0.5			ND (1.4) * ND (2.2) *	NT NT
NDOSULFAN SULFATE	~			ND (2.2)	NT
NDRIN NDRIN KETONE	10			ND (2.2)	NT
EPTACHLOR	0.3			ND (2.2) ND (1.4) *	NT NT
EPTACHLOR EPOXIDE	0.1			ND (1.4) *	NT
EXACHLOROBENZENE IETHOXYCHLOR	0.7 200			ND (1.6) * ND (14)	NT NT
W-846 8082A (mg/Kg dry)	200			ND (14)	<u> </u>
CB 1016	1		-	ND (11) *	NT
CB 1221 CB 1232	1			ND (11) * ND (11) *	NT NT
CB 1242	ĩ		-	ND (11)*	NT
CB 1248 CB 1254	1			ND (11) *	NT
CB 1254	1			ND (11) * ND (11) *	NT NT
CB 1262	1	ļ <b>.</b>		ND (11) *	NT
EB 1268 otal PCBs	1	,	,	ND (11)*	NT
V-846 8100 Modified (mg/Kg dry)		2	2	on men non-street prompte 224 (2001) A.P. (2012) A.P.	
'H V-846 8151A (μg/kg dry)	1000	5000	2500	2500	NT
V-846 8151A (μg/kg ary) 4-D	100000			ND (140)	NT
4-DB	100000			ND (140)	NT
4,5-TP (SILVEX) 4,5-T	100000 100000			ND (14) ND (14)	NT NT
ALAPON	~			ND (14) ND (340)	NT
САМВА	500000			ND (14)	NT
CHLOROPROP CPA	100000	]	1	ND (140) ND (14000)	NT NT
CPP	~		]	ND (14000) ND (14000)	NT NT
V-846 8260D (mg/Kg dry)	-				
ETONE RT-AMYL METHYL ETHER	6 ~		ł	NT NT	0.038 ND (0.0014)
NZENE	2		1	NT	0.0011
OMOBENZENE OMOCHLOROMETHANE	100		1	NT NT	ND (0.0027)
OMODICHLOROMETHANE  OMODICHLOROMETHANE	0.1			NT NT	ND (0.0027) ND (0.0027)
OMOFORM	0.1		i	NT	ND (0.0027)
OMOMETHANE BUTANONE (MEK)	0.5 4	Ì		NT NT	ND (0.014)
BUTYLBENZENE	~		ĺ	NT NT	ND (0.055) ND (0.0027)
C-BUTYLBENZENE	~	1	İ	NT	ND (0.0027)
RT-BUTYLBENZENE RT-BUTYLETHYL ETHER	100	]		NT NT	ND (0.0027)
RBON DISULFIDE	100			NT NT	ND (0.0014) 0.017

#### Table 2 Soil Precharacterization Results 240 Beaver Street, Waltham May 12, 2022

Parameter	Concentrations (RCs) RCS-1	for in-state Lined Landfill	for In-state Unlined Landfill	Comp #1 (2-10ft)	GP 3-5 (4-6ft)
Sampling Date		Cinco Candian	Olimied California	5/12/2022 12:00:00 PM	5/12/2022 12:00:00 PM
Sample Depth				2-10 Feet	4-6 Feet
CHLORODIBROMOMETHANE	0.005			NT	ND (0.0014)
CHLOROETHANE	100	ł		NT	ND (0.027)
CHLOROFORM	0.2			NT 	ND (0.0055)
CHLOROMETHANE 2-CHLOROTOLUENE	100 100			NT NT	ND (0.014) ND (0.0027)
1-CHLOROTOLUENE	100	l		NT	ND (0.0027)
1,2-DIBROMO-3-CHLOROPROPANE	10	l		NT	ND (0.0027)
L,2-DIBROMOETHANE (EDB)	0.1			NT	ND (0.0014)
DIBROMOMETHANE	500			NT	ND (0.0027)
1,2-DICHLOROBENZENE	9		l I	NT	ND (0.0027)
,3-DICHLOROBENZENE	3			NT	ND (0.0027)
L,4-DICHLOROBENZENE	0.7			NT	ND (0.0027)
DICHLORODIFLUOROMETHANE	1000	<b>i</b> .		NT	ND (0.027)
,1-DICHLOROETHANE ,2-DICHLOROETHANE	0.4 0.1	l '		NT NT	ND (0.0027)
,1-DICHLOROETHYLENE	3		1	NT NT	ND (0.0027) ND (0.0055)
CIS-1,2-DICHLOROETHYLENE	0.1			NT	ND (0.0033)
RANS-1,2-DICHLOROETHYLENE	1			NT	ND (0.0027)
,2-DICHLOROPROPANE	0.1	l		NT	ND (0.0027)
,3-DICHLOROPROPANE	500	•		NT	ND (0.0014)
,2-DICHLOROPROPANE	0.1		Į	NT	ND (0.0027)
,1-DICHLOROPROPENE	0.01		ļ.	NT	ND (0.0027)
IS-1,3-DICHLOROPROPENE	0.01			NT	ND (0.0014)
RANS-1,3-DICHLOROPROPENE	0.01			NT	ND (0.0014)
DIETHYL ETHER DISOPROPYL ETHER	100 100		'	NT NT	ND (0.027)
,4-DIOXANE	0.2			NT NT	ND (0.0014)
THYLBENZENE	40			NT NT	ND (0.14) ND (0.0027)
IEXACHLOROBUTADIENE	30			NT	ND (0.0027)
-HEXANONE	100			NT	ND (0.027)
SOPROPYLBENZENE	1000			NT	ND (0.0027)
-ISOPROPYLTOLUENE	100			NT	ND (0.0027)
NETHYL TERT-BUTYL ETHER (MTBE)	0,1			NT	ND (0.0055)
METHYLENE CHLORIDE	0.1			NT	ND (0.027)
-METHYL-2-PENTANONE (MIBK)	0.4		i i	NT	ND (0.027)
APHTHALENE -PROPYLBENZENE	4			NT	ND (0.0055)
TYRENE	100 3			NT NT	ND (0.0027) ND (0.0027)
,1,1,2-TETRACHLOROETHANE	0.1			NT	ND (0.0027)
1,2,2-TETRACHLOROETHANE	0.005			NT	ND (0.0014)
ETRACHLOROETHYLENE	1			NT	ND (0.0027)
ETRAHYDROFURAN	500			NT	ND (0.014)
OLUENE	30			NT	ND (0.0027)
2,3-TRICHLOROBENZENE	~			NT	ND (0.0027)
2,4-TRICHLOROBENZENE	. 2			NT	ND (0.0027)
1,1-TRICHLOROETHANE	30			NT	ND (0.0027)
1,2-TRICHLOROETHANE RICHLOROETHYLENE	0.1 0.3			NT NT	ND (0.0027) ND (0.0027)
RICHLOROFLUOROMETHANE	1000			NT NT	ND (0.0027)
2,3-TRICHLOROPROPANE	100			NT	ND (0.0027)
2,4-TRIMETHYLBENZENE	1000			NT	ND (0.0027)
3,5-TRIMETHYLBENZENE	10			NT	ND (0.0027)
NYL CHLORIDE	0.7			NT	ND (0.014)
I/P-XYLENE	100			NT	ND (0.0055)
-XYLENE	100			NT	ND (0.0027)
otal VOCs		10	4		0.0561
N-846 8270E (mg/Kg dry)	0.05	•		CONTRACTOR CONTRACTOR AND AN ACCOUNT OF THE	A)T
PHENYL CENAPHTHENE	0.05 4			ND (4.6) *	NT NT
CENAPHTHYLENE	1			ND (1.2) ND (1.2) *	NT NT
CETOPHENONE	1000			ND (2.3)	NT
VILINE	1000			ND (2.3)	NT
VTHRACENE	1000			ND (1.2)	NT
NZO(A)ANTHRACENE	7			ND (1.2)	NT
NZO(A)PYRENE	2			ND (1.2)	NT
NZO(B)FLUORANTHENE	7			ND (1.2)	NT
NZO(G,H,I)PERYLENE	1000			ND (1.2)	NT
NZO(K)FLUORANTHENE S(2-CHLOROETHOXY)METHANE	70 500		1	ND (1.2)	NT NT
S(2-CHLOROETHUXY)METHANE	0.7		J	ND (2.3) ND (2.3) *	NT NT
S(2-CHLOROISOPROPYL)ETHER	0.7		1	ND (2.3) *	NT
S(2-ETHYLHEXYL)PHTHALATE	90			ND (2.3)	NT
BROMOPHENYL PHENYL ETHER	100			ND (2.3)	NT
JTYLBENZYLPHTHALATE	100			ND (2.3)	NT
CHLOROANILINE	1		l	ND (4.5) *	NT
CHLORONAPHTHALENE	1000		[	ND (2.3)	NT
CHLOROPHENOL	0.7			ND (2.3) *	NT
RYSENE	70		ļ l	ND (1.2)	NT
BENZ(A,H)ANTHRACENE	0.7			ND (1.2) *	NT
BENZOFURAN	100			ND (2.3)	NT
-N-BUTYLPHTHALATE	50	l	Į	ND (2.3)	NT
2-DICHLOROBENZENE 3-DICHLOROBENZENE	9 3	l	•	ND (2.3)	NT NT
PICITOROBLITELITE	<b>.</b>		i	ND (2.3) ND (2.3) *	INI



#### Table 2 Soil Precharacterization Results 240 Beaver Street, Waltham May 12, 2022

	Reportable Concentrations (RCs)	Comm-97 Limits	Comm-97 Limits for In-state	SAMPLING LOCATION		
Parameter	RCS-1	Lined Landfill	Unlined Landfill	Comp #1 (2-10ft)	GP 3-5 (4-6ft)	
Sampling Date				5/12/2022 12:00:00 PM	5/12/2022 12:00:00 PM	
Sample Depth				2-10 Feet	4-6 Feet	
3,3'-DICHLOROBENZIDINE	3			ND (1.2)	NT	
2,4-DICHLOROPHENOL	0.7			ND (2.3) *	NT	
DIETHYLPHTHALATE	10	1.		ND (2.3)	TM	
2,4-DIMETHYLPHENOL	0.7			ND (2.3) * //	NT	
DIMETHYLPHTHALATE	0.7	1		ND (2.3) *	NT	
2,4-DINITROPHENOL	3			ND (4.5) *	NT	
2,4-DINITROTOLUENE	0.7			ND (2.3) *	NT	
2,6-DINITROTOLUENE	100			ND (2.3)	NT	
DI-N-OCTYLPHTHALATE	1000			ND (2.3)	NT	
1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	50			ND (2.3)	NT	
FLUORANTHENE	1000			ND (1.2)	NT	
FLUORENE	1000	1		ND (1.2)	NT	
HEXACHLOROBENZENE	0.7			0.73	NT	
HEXACHLOROBUTADIENE	30	ŀ		ND (2.3)	NT	
HEXACHLOROETHANE	0.7			ND (2.3) *	NT	
NDENO(1,2,3-CD)PYRENE	7			ND (1.2)	NT	
SOPHORONE	100			ND (2.3)	NT	
2-METHYLNAPHTHALENE	0.7			ND (1.2) *	NT	
D-CRESOL	500			ND (2.3)	NT	
M/P-CRESOL	500	i 1		ND (2.3)	NT	
NAPHTHALENE	4			ND (1.2)	NT	
NITROBENZENE	500	i i		ND (2.3)	NT	
2-NITROPHENOL	100			ND (2.3)	NT	
1-NITROPHENOL	100	1		ND (4.5)	NT	
PENTACHLOROPHENOL	3			ND (2.3)	NT	
PHENANTHRENE	10	1 .		ND (1.2)	NT	
PHENOL	1			ND (2.3) *	NT	
PYRENE	1000			ND (1.2)	NT	
PYRIDINE	500			ND (2.3)	NT	
I,2,4-TRICHLOROBENZENE	2			ND (2.3) *	NT	
2,4,5-TRICHLOROPHENOL	4	1 1		ND (2.3)	NT	
2,4,6-TRICHLOROPHENOL	0.7	]		ND (2.3) *	NT	
Total SVOCs		100	100	0.73	<u> </u>	
W-846 9014 (mg/Kg)						
REACTIVE CYANIDE	~	-		ND (3.9)	NT	
W-846 9030A (mg/Kg)						
REACTIVE SULFIDE	~ .	~	. ~	NO (19)	NT	
W-846 9045C (pH Units)						
PH OTES:		~	. ~	7.9	NT	

NOTES:

1. An asterisk (\*) following a detection limit indicates that the minimum laboratory reporting limit exceeds one or more of the regulatory criteria.

2. ND = Not detected above the lab reporting limits shown in parenthesis.

3. NT = Not tested.

4. ~ = NO Method 1 Standard or limit available

5. Shaded values exceed the MCP Reportable Concentrations (RCs).

### APPENDIX A

### SOIL BORING LOGS AND WELL CONSTRUCTION DIAGRAMS

### **TEST BORING LOG**

### **CDW Consultants, Inc.**

BORING ID: GP1-7MW Project No.: 1830 Client: City of Waltham Total Depth: 20 ft 240 Beaver St Location: Logged By: AMS Date Started: 5/28/2019 Completed: 5/28/2019 Contractor: Crawford Ground El. Casing ID: Sheet #:

Remarks: 6610 DT Geoprobe

#		Samp	le					
Depth (Feet)	Type & Num.		nge		PID Hdspace (ppmv)	Sample Description	Well Diagram	
0	S1		0'	40"	0	and the second s		
-1					0.1	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry		
-2					2	(FILL)		
-3					0.0	tan to gray fine to silty fine SAND,		
-4					4	little medium sand with wood and glass; dry		
			5'		0.1			
-5	S2		5'	48"	6			
-6					6			
-7					0.1	black fine to silty fine SAND, trace medium sand, with broken glass, asphalt pieces, concrete pebbles; dry		
0					8			
-8					0.3			
-9			10'		10			
-10	S3		10'	60"	10			
-11					0.9	See Above		
-11					12	See Above		
-12					12	Approximate Water Table		
-13					0.6	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet		
4.4					14			
-14			15'		14			
-15	S4		15'		0.1			
-16					16 16			
-17					0.0	gray fine to silty fine SAND, trace medium sand,		
-18					18	trace coarse sand with silt lenses; wet		
-10					18			
-19			20'		20			
-20			20		20	End of Boring at 20 feet; No Refusal		
			4 35					
	ate	Groundy Time				Summary  Measuring Point Overburden: Fill; Sand		
ט	aic	111111111111111111111111111111111111111	Dehii (0	Ground	water	Rock: NA		
						Well Depth: NA		
						Boring: 20'		

### **TEST BORING LOG**

### **CDW Consultants, Inc.**

Project No.: Total Depth:

1830.20 15'

Client: Location:

City of Waltham 240 Beaver St

BORING ID: GP3-1 Logged By:

Casing ID:

Date Started: 5/12/2022

Completed: 5/12/2022 Ground El.

Contractor: Sheet #:

AMS Soil Ex

Remarks:

6610 DT Geoprobe

<del>T</del>		Samp	le		T	7		
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram	
0	S1		0'	60"	0			
-1					0.0	tan to brown fine SAND, little coarse sand trace medium sand and gravel; dry (FILL)		
-2					2	VIEW		
-3					0.5	brown to black fine to silty fine SAND, black fine sand.		
-4			5'		4	ash layers; dry (FILL)		
-5	S2		5'	48"	0.1 6			
-6					6	black fine to medium SAND with ash and broken		
-7					0.9	with gravel and orange sand lenses; dry		
-8					8			
-9			10'		0.3	black tan fine to silty fine SAND,		
-10	S3		10'	60"	10	gray silt seams; moist		
-11					0.0	gray silty fine SAND, trace medium sand		
-12					12 12	moist to wet  Approximate Water Table		
-13					0.0	gray fine to silty fine SAND, trace medium sand, trace coarse sand; wet		
-14			4 = 1		14 14			
-15	S4		15' 15'		0.1	End of Boring at 15 feet; No Refusal		
-16					15			
-17		~~~						
-18								
-19								
-20								
-20								
		Groundw						
D	ate	Time	Depth to	Ground	lwater	Measuring Point Overburden: Fill; Sand		
						Rock: NA		
			<u> </u>			Well Depth: NA		
						Boring: 15'		

### **CDW** Consultants, Inc.

AMS

Soil Ex

Project No.: 1830.20 Client: City of Waltham BORING ID: GP3-2 Total Depth: Logged By: Contractor: 15' Location: 240 Beaver St Completed: 5/12/2022 Date Started: 5/12/2022 Casing ID: Ground El. Sheet #:

Remarks: 6610 DT Geoprobe

£.	T	Samp	le		T		E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	48"	0		
-1					0.1	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	
-2					2		
-3					0.0	brown to black fine to silty fine SAND,	
-4			5'		4	layered broken brick, concrete, tan fine sand. ash layers; dry (FILL)	
-5	S2		5'	48"	0.1	note: building materials of pasty caulking, glass and metals pieces	
-6			ļ		6	Lizz race with a same with the	
-7					0.1	black fine to medium SAND with ash and broken with gravel and orange sand lenses; dry	
-8					8	[발생: 정말 : [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [	
-9					0.3	black tan fine to slity fine SAND,	
			10'		10	gray silt seams; moist	
-10	S3		10'	60"	10		
-11					0.9	gray silty fine SAND, trace medium sand moist to wet	
-12					12	Approximate Water Table	
-13			*********		0.6	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; wet	
-14			4 61		14 14		
-15	S4		15' 15'		0.1 15	End of Boring at 15 feet; No Refusal	
-16					15		
-17							
-18							
-19							
-20							i
I		Groundy	ater Me	asure	ments	Summary	
D	ate					Measuring Point Overburden: Fill; Sand	
						Rock: NA	
						Well Depth: NA	
						Boring: 15'	

#### CDW Consultants, Inc.

Project No.: Total Depth: 1830.20

Client: Location: City of Waltham 240 Beaver St

BORING ID: GP3-3

Date Started: 5/12/2022

15'

Completed: 5/12/2022 Ground El.

Logged By: Contractor: Sheet #:

AMS Soil Ex

Casing ID: Remarks:

6610 DT Geoprobe

Sample Depth (Feet) Well Diagram PID Hdspace (ppmv) Type & Num. Recovery Depth Range Blows per 6 Inches **Sample Description** S1 42" 0 0' 0 tan to brown fine SAND, little coarse sand 0.1 -1 trace medium sand and gravel; dry (FILL) -2 1.4 -3 brown to black fine to silty fine SAND, black coarse sand with crushed brick -4 dry (FILL) 2.2 S2 48" -5 -6 black fine to medium SAND with ash and broken 0.9 -7 with gravel and orange sand lenses; dry (FILL) -8 0.1 -9 black tan fine to silty fine SAND, 10 gray silt seams; moist 10 -10 S3 10' 48" 10 0.0 <u>-11</u> gray silty fine SAND, trace medium sand moist to wet -12 12 Approximate Water Table 0.0 -13 trace coarse sand; wet -14 14 15' 0.0 -15 <u>S4</u> 15' End of Boring at 15 feet; No Refusal 15 -16 -17 -18 -19 -20 **Groundwater Measurements** Summary Date Depth to Groundwater Measuring Point Overburden: Fill; Sand Rock: NA Well Depth: NA Boring: 15'

#### CDW Consultants, Inc.

Project No.: 1830.20 Client: City of Waltham BORING ID: GP3-4 Total Depth: 15' Location: 240 Beaver St Logged By: AMS Completed: 5/12/2022 Date Started: 5/12/2022 Contractor: Soil Ex Casing ID: Ground El. Sheet #: 7 Remarks: 6610 DT Geoprobe

<del>£</del>		Samp	le		T	T	E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	48"	0		
-1					0.1	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	
-2					2		
-3					0.0	brown to black fine to silty fine SAND, layered broken brick, concrete, tan fine sand.	
-4			5'		4 0.1	ash layers; dry (FILL)	
-5	S2		5'	48"	6		
-6					6	black fine to medium SAND with ash and broken	
-7					0.1	brick and coal pieces; dry	
-8					8		
-9			10'		0.3	black tan fine to silty fine SAND, gray silt layers; moist	
-10	S3		10'	60"	10	gray and a york more	
-11					0.9	gray silty fine SAND, trace medium sand	
-12					12	moist to wet Approximate Water Table	
-13					0.6	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; wet	
-14					14 14		
			15'		0.1		
-15	S4		15'		15	End of Boring at 15 feet; No Refusal	
-16					13		
-17							
-18							
-19							
-20							
	LL	Groundw	/ater Me	asure	mente	Summary	
Ē	Date					Measuring Point Overburden: Fill; Sand	
						Rock: NA	
						Well Depth: NA	
****		l			1	Boring: 15'	·

### **CDW Consultants, Inc.**

Project No.: 1830.20 Client: City of Waltham BORING ID: GP3-5 Total Depth: 15' 240 Beaver St Location: Logged By: AMS Date Started: 5/12/2022 Completed: 5/12/2022 Contractor: Soil Ex Casing ID: Ground El. Sheet #:

Remarks: 6610 DT Geoprobe

<del>2</del>		Samp	le		J		Ę
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0		
-1					0.1	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	
-2					2		
-3					3.7	brown to black fine to silty fine SAND, layered broken brick, concrete, tan fine sand.	
-4			5		4 7.8	ash layers; dry (FILL)	
-5	S2		5'	48"		note: building materials of pasty caulking, glass and metals pieces	
-6					6	black fine to medium SAND with ash and broken	
-7					4.2	concrete and coal pieces; dry	
-8					8	Section (1)	
-9			10'		0.3	black tan fine to silty fine SAND, gray silt seams; moist	
-10	S3		10'	60"	10	9070111000	
-11					0.8	gray silty fine SAND, trace medium sand	ļ
-12					12	moist to wet	
					0.1	gray fine to silty fine SAND, trace medium sand,	
-13						trace coarse sand with gravel pieces; wet	
-14					14		
			15'		1		
-15	S4		15'		0.0	End of Boring at 15 feet; No Refusal	:
-16					15		
-17							
-18							
-19							
-20							
		Groundw					
D	ate	Time	Depth to	Ground	dwater	Measuring Point Overburden: Fill; Sand	
						Rock: NA Well Depth: NA	
						Boring: 15'	
	l.	i				promise to	

#### **CDW** Consultants, Inc.

City of Waltham 240 Beaver St Project No.: 1830.20 Client: BORING ID: GP3-6 Total Depth: 15' Location: Logged By: AMS Date Started: 5/12/2022 Casing ID: Completed: 5/12/2022 Contractor: Soil Ex Ground El. Sheet #: 1 Remarks: 6610 DT Geoprobe

(F)		Samp	le		T		E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	48"	0		
-1					0.1	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry	
-2					2	(FILL)	
					2.2		
-3					4	brown to black fine to silty fine SAND, coal pieces, concrete, tan fine sand.	
-4					4	ash layers; dry	
-5	S2		5' 5'	48"	0.5	(FILL)	
					6		
-6	-	****	<u> </u>	-	6	block fine to modition OAND with high and beginn	
-7				<del>                                     </del>	0.1	black fine to medium SAND with ash and broken concrete and coal pieces; dry	
					8		
-8				ļ	8		
-9				<u> </u>	0.3	black tan fine to silty fine SAND,	
			10'		10	gray silt seams; moist	
-10	S3		10'	60"	10		
-11					0.9		
				<u> </u>	12		
-12				1	12	Approximate Water Table gray fine to silty fine SAND, trace medium sand,	
-13				<b> </b>	0.6	trace coarse sand with gravel pieces; wet	
					14	• ' '	1
-14			15'		14		
-15	S4		15'		0.1	End of Boring at 15 feet; No Refusal	
-16					15		
-10							1
-17							
-18							
-19							
-20							
		Groundw					
	ate	Time	Depth to	Ground	dwater	Measuring Point Overburden: Fill; Sand Rock: NA	
		· -				Rock: NA Well Depth: NA	
						Boring: 15'	

#### CDW Consultants, Inc.

Date Started: 5/12/2022
Casing ID:
Remarks Project No.: Total Depth:

Client:

City of Waltham 240 Beaver St

BORING ID: GP3-7

Sheet #:

Location: Completed: 5/12/2022

Ground El.

Logged By: Contractor:

AMS Soil Ex

1

6610 DT Geoprobe

et)		Sam	ple					
Depth (Feet)	C Type & Num.	Blows per 6 inches		Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	
0	S1		0'		50"	0		
-1						0.1	tan to brown fine SAND, little coarse sand trace medium sand and gravel; dry (FILL)	<b>i</b>
-2						2		
-3						0.1	brown to black fine to silty fine SAND, black coarse sand with crushed brick	
-4				5'		4	dry (FILL)	
-5	S2		5'		48"	0.2		
-6						6		
<b>-</b> 7						0.1	black fine to medium SAND with ash and bro with gravel and rounded pebbles; dry (FILL)	ken
-8						8		
-9						0.1	Martham San to Sile San CANID	
-9			-	10'		10	black tan fine to silty fine SAND, gray silt seams; moist	
-10	S3		10'		60"	10		
-11						0.0	gray silty fine SAND, trace medium sand moist to wet	
-12			+-			12	Approximate Water Table	
-13						0.0	trace coarse sand; wet	
·14			-			14 14		
				15'		0.0		
15	S4		15'			15	End of Boring at 15 feet; No Refusal	
16								
17								
18			<b> </b>					
19			-					
20								
I		Ground	wate	r Me	asure	ments	Summary	<u></u>
D	ate	Time					Measuring Point Overburden: Fill; Sand	
			<del>                                     </del>				Rock: NA	
							Well Depth: NA Boring: 15'	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830.20 15'

Client: Location: City of Waltham 240 Beaver St

BORING ID: GP3-8

AMS

Date Started: 5/12/2022 Casing ID:

Completed: 5/12/2022 Ground El.

Logged By: Contractor: Sheet #:

Soil Ex 1

6610 DT Geoprobe Remarks:

÷.	1	Samp	le		1		Ε
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	48"	0		
-1					0.0	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	
-2					2	VIL.	
-3					0.0	black fine to silty fine SAND, crushed brick, concrete, tan fine sand.	
-4			5'		1.2	ash layers with gravel; dry (FILL)	
<b>-</b> 5	S2		5'	48"	6		
-6 -7					2.9	black fine to medium SAND with ash and broken concrete and coal pieces; dry	
-8					8		
-9			10'		0.3	black tan fine to silty fine SAND, gray silt seams; moist	
-10	S3		10'	60"	10		
-11					0.4	gray silty fine SAND, trace medium sand moist to wet	
-12					12	Approximate Water Table	
-13					0.0	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; wet	
-14			15'		14		
-15	S4		15'		0.0	End of Boring at 15 feet; No Refusal	
-16							
·17							
-18							
-19							
-20							
		Groundy					
D	ate	Time	Depth to	Ground	dwater		
						Rock: NA Well Depth: NA	
						Boring: 15'	
		L					—

6610 DT Geoprobe

Remarks:

#### CDW Consultants, Inc.

Project No.: 1830.20 Client: City of Waltham BORING ID: GP3-9 Total Depth: 15' Location: 240 Beaver St Logged By: AMS Completed: 5/12/2022 Date Started: 5/12/2022 Contractor: Soil Ex Casing ID: Ground El. Sheet #: 1

(Fee		Samp				l i	=
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	42"	0		
-1					0.0	tan to brown fine SAND, little coarse sand trace medium sand and gravel; dry (FILL)	
-2					2		
-3					0.4	brown to black fine to silty fine SAND, black coarse sand	
-4	······································				4	dry	
-5	S2		5' 5'	48"	1.9	(FILL)	
-6					6		
-7					0.9	black fine to medium SAND with ash and broken with gravel and orange sand lenses; dry	
-8					8	(FILL)	
-0				<u> </u>	1		
-9					0.3	black tan fine to slity fine SAND,	
-10	S3		10' 10'	48"	10 10	gray silt seams; moist	
-11			10	40	0.0	gray silty fine SAND, trace medium sand	
					12	moist to wet	
-12					12	Approximate Water Table	
-13					0.0	trace coarse sand; wet	
-14					14 14		
• •			15'				
-15	S4		15'		0.0	End of Boring at 15 feet; No Refusal	
-16					15		
-17							
-18							
-19							
-20							
		Groundy	vater Mo	asure	mente	Summary	
Da	ate					Measuring Point Overburden: Fill; Sand	
						Rock: NA	
						Well Depth: NA	
						Boring: 15'	

#### CDW Consultants, Inc.

Project No.: 1830 Client: City of Waltham BORING ID: GP4-1 Total Depth: 15 ft Location: 240 Beaver St Logged By: AMS Completed: 12/9/2019 Date Started: 12/9/2019 Contractor: Crawford Casing ID: Ground El. Sheet #: Remarks: 6610 DT Geoprobe

क्र		Samp	le		Τ		Ē
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	40"	0		
1					0.1	tan to brown fine SAND, little coarse sand	
-1				<del> </del>	2	trace medium sand with wood and gravel; dry (FILL)	
-2				<del>                                     </del>	2	(I)LL/	
					0.0		
-3					] 0.0	tan to gray fine to silty fine SAND,	
	<b></b>			ļ	4	little medium sand with glass; dry	
<del>-4</del>	-		5'	-	4	(FILL)	
-5	S2		5'	48"	0.1		
			<u> </u>	<u> </u>	6		
-6					6		
7					0.1	black fine to silty fine SAND, trace medium sand,	
-7	<u> </u>				8	with broken glass, concrete pieces; dry	
-8					8	(FILL)	
<u></u> _							
-9					0.3		
		1	10'	.1	10		
-10	S3		10'	60"	10		
-11					0.9	See Above	
				<u> </u>	12	OCC ADOVC	
-12					12	Approximale Water Table	
					0.6	gray fine to silty fine SAND, trace medium sand,	
-13						trace coarse sand with gravel pieces; moist to wet	
-14				<del>                                     </del>	14		
•••			15'				
-15	S4		15'			End of Boring at 15 feet; No Refusal	
-16							
-17							
-18							
-19							
-20							
~~							
	·	Groundw	ater Me	asure	ments	Summary	
E	ate	Time	Depth to	Ground	water	Measuring Point Overburden: Fill; Sand	
						Rock: NA	
						Well Depth: NA	
						Boring: 15'	

#### **CDW Consultants, Inc.**

 Project No.:
 1830

 Total Depth:
 15 ft

 Date Started:
 12/9/2019

Client: Location:

City of Waltham 240 Beaver St BORING ID: GP4-2 Logged By: Contractor: Completed: 12/9/2019

AMS Crawford

1

Casing ID:

Remarks:

6610 DT Geoprobe

Ground El. Sheet #:

<b></b>	1	Samp	ole		T	
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description
0	S1		0'	40"	0	
-1					0.1	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)
-2					2	
-3					0.0	tan to gray fine to silty fine SAND,
-4			5'		4	little medium sand with wood and glass; dry (FILL)
-5	S2		5'	48"	0.1	
<b>-</b> 6					6 0.1	isterak iliae; কৈ আমুস নীম্ভ (SYXMP), কিল্পেন, কালগোল্যাকা Sernal,
-7	ļ .		ļ			viita braven oliass, aspiaili pienės, connecte pieross any . (Elilla):
-8					8	(1:11-45);
-9			10'		0.3	(Special Adoptives)
-10	S3		10'	60"	10	
-11					0.9	gray fine to silty fine SAND, trace medium sand, moist
-12					12	Approximate Water Table
-13					0.6	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet
-14			451		14	
-15			15'			End of Boring at 15 feet; No Refusal
-16						
-17						
-18						
-19						
-20						
		Groundy				
C	ate	Time	Depth to	Groun	dwater	Measuring Point Overburden: Fill; Sand
				·		Rock: NA Well Depth: NA
						Boring: 15'
			L			1

#### **CDW** Consultants, Inc.

Project No.: Total Depth: 15 ft
Date Started: 12/9/2019

1830

Client: Location:

City of Waltham 240 Beaver St

BORING ID: GP4-3 Logged By: Contractor:

AMS Crawford

Casing ID: Remarks:

6610 DT Geoprobe

Completed: 12/9/2019 Ground El.

Sheet #:

<b>₩</b>	T	Sam	ple	<del></del>				E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range		recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram
0	S1		0'	4	0" 0			
-1						0.0	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	
-2					2			
-3						0.0	tan to gray fine to silty fine SAND,	
-4					4	4	little medium sand with wood and glass; dry (FILL)	
-5	S2		5'	5' 4	8"	0.9		
-6					6	6		
-7						1.2	bleidk fine to slivy fine SANND, पहलट medium send), vulta asoken elecs, balak and woods, day.	
-8					8	8	(田田)	
-9					4	0.7		
-10	S3		10'	10' 4	0" 10	10		
-11	- 00		110	41		0.2	gray fine to silty fine SAND, trace medium sand, moist	
-12					1:	12	Approximate Water Table	
-13						0.1	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet	
-14						14		
-15				15'			End of Boring at 15 feet; No Refusal	
-16								
-17								
-18								
-19								
-20								
				$\dashv$	+			
		Ground	water	Meası	irem	ents		
D	ate	Time	Depth	to Gro	undw	ater	Measuring Point Overburden: Fill; Sand	
							Rock: NA	
							Well Depth: NA	
							Boring: 15'	

#### **CDW Consultants, Inc.**

 Project No.:
 1830

 Total Depth:
 15 ft

 Date Started:
 12/9/2019

Client: Location:

Ground El.

City of Waltham 240 Beaver St Logged By: Contractor: Completed: 12/9/2019

BORING ID: GP4-4 AMS Crawford

1

Casing ID: Remarks:

6610 DT Geoprobe

Sheet #:

Rema	11 NS.	ועטוסס	Seoprob	<del>C</del>				
F	<u> </u>	Samı	ole	·	Т			E
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)		Sample Description	Well Diagram
0	S1		0'	40"	0			
-1					0.0	trace medi	own fine SAND, little coarse sand um sand with wood and gravel; dry (FILL)	
-2					2			
-3					0.0		gray fine to silty fine SAND,	
-4			5	0	4	little medi	um sand with wood and glass; dry (FILL)	
-5	S2		5'	48"	0.9			
-6					6			
-7					1.2	સ્કૃષ્ટિ ફાઇપ્રોઇપાઇ સ્થાપ	siliy ilaa SAND, iraas medium sant ss, andaalinaases, conucus picoses diy (মোট্র)	
-8					8			
-9					0.7			
-10	S3 ·		10'	40"	10	<ul> <li>Christian Community of the</li></ul>	black fine SAND, little gravel,	
-11					0.2		ace slit with wood; moist (FILL)	
-12				-	12 12	Approximate Water Table		
-13					0.1	gray fine to	silty fine SAND, trace medium sand, sand with gravel pleces; moist to wet	
-14			15		14			
-15			10			End of	Boring at 15 feet; No Refusal	-
-16								
-17								
-18								
-19								
-20								
		C	water 15				Summan,	
D	ate	Ground Time				Measuring Point	Summary Overburden: Fill; Sand	
							Rock: NA	
							Well Depth: NA Boring: 15'	
			l <sub></sub>				Dorling. 10	

#### CDW Consultants, Inc.

Project No.: Total Depth:

1830 15 ft

Date Started: 12/9/2019

City of Waltham Client: 240 Beaver St Location:

Ground El.

BORING ID: GP4-5 Logged By: Contractor:

AMS Crawford

Casing ID: Remarks:

6610 DT Geoprobe

Completed: 12/9/2019 Sheet #:

et)		Samp	le		]		Ĕ
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Moll Disorse
0	S1		0'	40"	0		
-1					0.0	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)	
-2					2		
-3					0.9	tan to gray fine to silty fine SAND,	
-4			5		4	little medium sand with wood and glass; dry (FILL)	
-5	S2		5'	48"	0.1		
-6					6		
-7					0.6	নিহার পার জেরামি, মিল SAND: এইতে মাহতীয়ার প্রকরে। আফিস্করের এপ্রেক্ত ক্রেমিট রাজ ((ইম্ফিন)	
-8					8		
-9			401		0.4		
-10	S3		10' 10'	40"	10	gray to black fine SAND, little gravel, trace silt with wood; moist	
-11					0.0	(FILL)	
-12					12	Approximate Water Table	
-13					0.1	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet	
·14			15'				
15			13			End of Boring at 15 feet; No Refusal	
16							
-17							
-18							
19							
-20							
		Groundw	ater Me	asure	mente	Summary	
D	ate					Measuring Point Overburden: Fill; Sand	<u>-</u>
						Rock: NA	
						Well Depth: NA	
						Boring: 15'	

#### CDW Consultants, Inc.

Project No.: 1830 Client: City of Waltham BORING ID: GP4-6 240 Beaver St Total Depth: Logged By: Contractor: AMS 15 ft Location: Date Started: 12/9/2019 Completed: 12/9/2019 Crawford Casing ID: Ground El. Sheet #: 6610 DT Geoprobe Remarks:

£	Sample				T					
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram			
0	S1		0'	40"	0					
-1					0.0	tan to brown fine SAND, little coarse sand trace medium sand with wood and gravel; dry (FILL)				
-2					2					
-3					0.0	tan to gray fine to silty fine SAND,				
-4			5	1	4	little medium sand with wood and glass; dry (FILL)				
-5	S2		5'	48"	0.1					
-6			<u> </u>	ļ	6					
-7					0.0	ভিৰেধ fine (o silty fine SyAMD) fracts freedringsears. with broken glass; fine a); ধানু (मिदि)				
-8				1	8					
					1.6					
-9			40	<u> </u>						
-10	S3		10 10'	45"	10	gray to black fine SAND, little gravel, trace sllt with wood; moist				
-11					0.0	(FILL)				
-12					12	Approximale Water Table				
-13					0.1	gray fine to silty fine SAND, trace medium sand, trace coarse sand with gravel pieces; moist to wet				
-14			-	1	14					
			15'							
-15						End of Boring at 15 feet; No Refusal				
-16										
-17										
-18							i			
-19										
-20										
		Groundy								
D	ate	Time	Depth to	Ground	dwater	Measuring Point Overburden: Fill; Sand				
						Rock: NA				
						Well Depth: NA Boring: 15'				
						Boring: 15'				

#### **CDW** Consultants, Inc.

Project No.: Total Depth: 1830 15 ft Date Started: 12/9/2019

Client: Location:

Ground El.

City of Waltham BORING ID: GP4-7 240 Beaver St Logged By: Completed: 12/9/2019 Contractor: Sheet #:

AMS Crawford

Casing ID: Remarks:

6610 DT Geoprobe

et î		Samı	ole		T	T				
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagram			
0	S1		0'	40"	0	black asphalt and graded base				
-1					0.0	tan to gray fine SAND, trace gravel with broken concrete pieces; dry				
-2	<u> </u>		-		2	(FIEL)				
-3					1.3	tan to gray fine to silty fine SAND, little medium sand; dry				
-4					4					
-5	S2		5' 5'	48"	1.1					
-6					6	The fact that the second secon				
-7					0.9	black fine to silty fine SAND, trace medium sand, with wood; dry				
-8			-		8	(FILL)				
-9					0.3	see above with 6" concrete layer				
			10'		10	(FILL)				
-10	S3		10'	60"	10					
-11					2.6					
					12	black fine to silty fine SAND, trace medium sand,				
-12					12	trace coarse sand; moist to wet				
-13					1.3					
-14										
-15			15'			End of Boring at 15 feet; No Refusal				
-16										
-17										
-18										
-19										
-20										
I	l	Groundy	vater Me	asure	ments	Summary				
D	ate	Time				Measuring Point Overburden: Fill; Sand				
						Rock: NA				
						Well Depth: NA Boring: 15'				
						Boring: 15'				

	Ground	lwater Measurements	3	Summary	
Date	Time	Depth to Groundwater	Measuring Point	Overburden:	Fill; Sand
				Rock:	NA
				Well Depth:	NA
				Boring:	15'

### CDW Consultants, Inc.

Project No.: 1830 Client: BORING ID: GP4-8 City of Waltham Total Depth: 15 ft Location: 240 Beaver St Logged By: AMS Date Started: 12/9/2019
Casing ID: Completed: 12/9/2019 Contractor: Crawford Ground El. Sheet #: Remarks: 6610 DT Geoprobe

Ĕ	Sample				1				
Depth (Feet)	Type & Num.	Blows per 6 Inches	Depth Range	Recovery	PID Hdspace (ppmv)	Sample Description	Well Diagran		
0	S1		0'	48"	0	black asphalt and graded base			
-1	1			┼	0.0	ter to see a Constitution of the Constitution			
<u> </u>	<u> </u>			+	- 2	tan to gray fine SAND, trace gravel with a broken concrete pieces; dry			
-2					2	(FILL)			
					0.0	7			
-3	<u> </u>		<u> </u>	ļ	0.0	tan to gray fine to silty fine SAND,			
-4					4	little medium sand; dry			
<u> </u>			5'	<del> </del>	<u> </u>	(FILL)			
-5	S2		5'	40"	0.9				
		-			6				
-6					6				
-7					1.9	black fine to silty fine SAND, trace medium sand,	ı		
-			X		8	with wood; dry (FILL)	ĺ		
-8				<del>                                     </del>	8	(EIEC)			
					0.0		l		
-9						see above with 6" concrete layer			
10			10'	40"	10	ne de la companya de la companya de la companya de la companya de la companya de la companya de la companya de			
-10	S3		10'	48"	10	2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	İ		
-11					8.0				
					12	black fine to silty fine SAND, trace medium sand,	- }		
-12					12	trace coarse sand; moist to wet	- 1		
40					0.7	(FILL)			
-13	<u> </u>						l		
-14					14				
			15'			End of Boring at 15 feet; No Refusal	1		
-15									
							l		
-16									
-17					Į		-		
••							ĺ		
-18									
-19									
-20									
-20									
l		Groundw	ater Me	asurer	nents	Summary			
D	ate				***	Measuring Point Overburden: Fill; Sand			
						Rock: NA	$\neg$		
						Well Depth: NA			
	<u>l</u> _					Boring: 15'			
Manua	·····						- 1		

### APPENDIX B

## LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY RECORDS



May 31, 2022

Alan Sundquist CDW Consultants, Inc. 4 California Drive, Suite 301 Framingham, MA 01760

Project Location: 240 Beaver St., Waltham, MA

Client Job Number: Project Number: 1830.1

Laboratory Work Order Number: 22E0834

Keny K. Mille

Enclosed are results of analyses for samples as received by the laboratory on May 12, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerry K. McGee Project Manager

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CDW Consultants, Inc. 4 California Drive, Suite 301 Framingham, MA 01760 ATTN: Alan Sundquist

REPORT DATE: 5/31/2022

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1830.1

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER:

22E0834

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION:

240 Beaver St., Waltham, MA

FI	ELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Co	mp #1 (2-10ft)	22E0834-01	Soil		SM 2540G	
					SM21-23 2510B	
					Modified	
					SW-846 1010A-B	
					SW-846 6010D	
					SW-846 7471B	
					SW-846 8081B	
					SW-846 8082A	
					SW-846 8100 Modified	
					SW-846 8151A	
					SW-846 8270E	
					SW-846 9014	
					SW-846 9030A	
					SW-846 9045C	
GP	3-5 (4-6ft)	22E0834-02	Soil		SM 2540G	
					SW-846 8260D	



#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report. For method 8151 samples were derivatized on 05/27/22.

For method 8151 samples analysis bracketed by LCS to monitor esterification. All recoveries in the bracketing LCS met method criteria.



SW-846 6010D

Qualifications:

M-10

The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side. Analyte & Samples(s) Qualified:

Lead

22E0834-01[Comp #1 (2-10ft)], B308621-SRM1

SW-846 8081B

Qualifications:

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

22E0834-01[Comp #1 (2-10ft)]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl

22E0834-01[Comp #1 (2-10ft)]

Decachlorobiphenyl [2C]

22E0834-01[Comp #1 (2-10ft)]

Tetrachloro-m-xylene

22E0834-01[Comp #1 (2-10ft)]

Tetrachloro-m-xvlene [2C]

22E0834-01[Comp #1 (2-10ft)]

SW-846 8082A

Qualifications:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl

22E0834-01[Comp #1 (2-10ft)]

Decachlorobiphenyl [2C]

22E0834-01[Comp #1 (2-10ft)]

Tetrachloro-m-xylene

22E0834-01[Comp #1 (2-10ft)]

Tetrachloro-m-xylene [2C]

22E0834-01[Comp #1 (2-10ft)]

SW-846 8100 Modified

#### **Qualifications**:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

2-Fluorobiphenyl

22E0834-01[Comp #1 (2-10ft)]

SW-846 8151A

Qualifications:

0-32

A dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

22E0834-01[Comp #1 (2-10ft)]



S-12

Surrogate recovery is outside of control limits on confirmatory column, but within control limits on primary column. Data validation is not

affected.
Analyte & Samples(s) Qualified:

2,4-Dichlorophenylacetic acid

22E0834-01[Comp #1 (2-10ft)]

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

MCPP

B309280-BLK1, B309280-BS1, B309280-BSD1

SW-846 8260D

#### **Oualifications:**

S-17

Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and

Analyte & Samples(s) Qualified:

1,2-Dichloroethane-d4

22E0834-02[GP 3-5 (4-6ft)]

V-16

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported

result.
Analyte & Samples(s) Qualified:

1,4-Dioxane

B308386-BSD1

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
.nalyte & Samples(s) Qualified:

Bromomethane

22E0834-02[GP 3-5 (4-6ft)], B308386-BLK1, B308386-BS1, B308386-BSD1, S071520-CCV1

V-36

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound. Analyte & Samples(s) Qualified:

2-Butanone (MEK)

B308386-BS1, B308386-BSD1, S071520-CCV1

2-Hexanone (MBK)

B308386-BS1, B308386-BSD1, S071520-CCV1

SW-846 8270E

#### Qualifications:

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this

compound.
Analyte & Samples(s) Qualified:

2,4-Dinitrophenol

22E0834-01[Comp #1 (2-10ft)], B308526-BLK1, B308526-BSD1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Aniline

22E0834-01[Comp #1 (2-10ft)], B308526-BLK1, B308526-BS1, B308526-BSD1, S071740-CCV1

Bis(2-chloroisopropyl)ether

B308526-BLK1, B308526-BS1, B308526-BSD1, S071740-CCV1



V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated

estimated.
Analyte & Samples(s) Qualified:

4-Chloroaniline

22E0834-01[Comp #1 (2-10ft)], B308526-BLK1, B308526-BS1, B308526-BSD1, S071740-CCV1

Bis(2-chloroisopropyl)ether

22E0834-01[Comp #1 (2-10ft)]

SW-846 8100 Modified

TPH (C9-C36) is quantitated against a calibration made with a diesel standard.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski Laboratory Director

Page 9 of 64



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01
Sample Matrix: Soil

			Semivol	atile Organic C	ompounds by	GC/MS		Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Biphenyl	ND	4.6	0.36	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Acenaphthene	ND	1.2	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Acenaphthylene	ND	1.2	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Acetophenone	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Aniline	ND	2.3	0.40	mg/Kg dry	5	V-05	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Anthracene	ND	1.2	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(a)anthracene	ND	1.2	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(a)pyrene	ND	1.2	0.40	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(b)fluoranthene	ND	1.2	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(g,h,i)perylene	ND	1.2	0.50	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(k)fluoranthene	ND	1.2	0.40	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Bis(2-chloroethoxy)methane	ND	2.3	0.44	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Bis(2-chloroethyl)ether	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Bis(2-chloroisopropyl)ether	ND	2.3	0.62	mg/Kg dry	5	V-34	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Bis(2-Ethylhexyl)phthalate	ND	2.3	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
4-Bromophenylphenylether	ND	2.3	0.43	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Butylbenzylphthalate	ND	2.3	0.42	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
4-Chloroaniline	ND	4.5	0.30	mg/Kg dry	5	V-34	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2-Chloronaphthalene	ND	2.3	0.40	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2-Chlorophenol	ND	2.3	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Chrysene	ND	1.2	0.43	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Dibenz(a,h)anthracene	ND	1.2	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Dibenzofuran	ND	2.3	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Di-n-butylphthalate	ND	2.3	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,2-Dichlorobenzene	ND	2.3	0.42	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,3-Dichlorobenzene	ND	2.3	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,4-Dichlorobenzene	ND	2.3	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
3,3-Dichlorobenzidine	ND	1.2	0.31	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4-Dichlorophenol	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Diethylphthalate	ND	2.3	0.43	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4-Dimethylphenol	ND	2.3	0.59	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Dimethylphthalate	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4-Dinitrophenol	ND	4.5	2.0	mg/Kg dry	5	R-05	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4-Dinitrotoluene	ND	2.3	0.48	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,6-Dinitrotoluene	ND	2.3	0.51	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Di-n-octylphthalate	ND	2.3	0.67	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,2-Diphenylhydrazine/Azobenzene	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Fluoranthene	ND	1.2	0.43	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Fluorene	ND	1.2	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Hexachlorobenzene	0.73	2.3	0.45	mg/Kg dry	5	J	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Hexachlorobutadiene	ND	2.3	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Hexachloroethane	ND	2.3	0.44	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
indeno(1,2,3-cd)pyrene	ND	1.2	0.52	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
sophorone	ND	2.3	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01
Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS	

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylnaphthalene	ND	1.2	0.51	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2-Methylphenol	ND	2.3	0.49	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
3/4-Methylphenol	ND	2.3	0.49	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Naphthalene	ND	1.2	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Nitrobenzene	ND	2.3	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2-Nitrophenol	ND	2.3	0.49	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
4-Nitrophenol	ND	4.5	1.0	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Pentachlorophenol	ND	2.3	0.93	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Phenanthrene	ND	1.2	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	ΙMR
PhenoI	ND	2.3	0.51	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Ругепе	ND	1.2	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Pyridine	ND	2.3	0.33	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,2,4-Trichlorobenzene	ND	2.3	0.44	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4,5-Trichlorophenol	ND	2.3	0.45	mg/Kg dry	5	*	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4,6-Trichlorophenol	ND	2.3	0.44	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Surrogates		% Reco	very	Recovery Limits		Flag/Qual				
2-Fluorophenol		50.9		30-130					5/19/22 0:08	
Phenol-d6		48.4		30-130					5/19/22 0:08	
Nitrobenzene-d5		47.5		30-130					5/19/22 0:08	
2-Fluorobiphenyl		61.4		30-130					5/19/22 0:08	
2,4,6-Tribromophenol		59.8		30-130					5/19/22 0:08	
p-Terphenyl-d14		58.1		30-130					5/19/22 0:08	



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01
Sample Matrix: Soil

Sample Flags: RL-11			Or	ganochloride Pest	icides by GC	ÆCD				
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	1.4	0.12	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
alpha-BHC [1]	ND	1.4	0.58	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	ЛМВ
beta-BHC [1]	ND	1.4	0.49	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
delta-BHC [1]	ND	1.4	0.66	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
gamma-BHC (Lindane) [1]	ND	0.55	0.13	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Chlordane [1]	ND	5.5	2.1	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
4,4'-DDD [2]	34	1.1	0.099	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
4,4'-DDE [1]	3.2	1.1	0.11	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
4,4'-DDT [1]	1400	110	13	mg/Kg dry	20000		SW-846 8081B	5/13/22	5/22/22 13:57	JMB
Dieldrin [1]	7.8	1.1	0.10	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endosulfan I [1]	ND	1.4	0.47	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endosulfan II [1]	ND	2.2	0.47	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endosulfan sulfate [1]	ND	2.2	0.50	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endrin [1]	ND	2.2	0.47	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	ЛМВ
Endrin ketone [1]	ND	2.2	0.61	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Heptachlor [1]	ND	1.4	0.15	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Heptachlor epoxide [1]	ND	1.4	0.12	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Iexachlorobenzene [1]	ND	1.6	0.62	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Methoxychlor [1]	ND	14	1.7	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Surrogates		% Reco	very	Recovery Limit	1	Flag/Qual			***************************************	
Decachlorobiphenyl [1]			*	30-150		S-01			5/22/22 13:30	
Decachlorobiphenyl [2]			*	30-150		S-01			5/22/22 13:30	
Tetrachloro-m-xylene [1]			*	30-150		S-01			5/22/22 13:30	
Tetrachloro-m-xylene [2]			*	30-150		S-01			5/22/22 13:30	



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01
Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1221 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1232 [i]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1242 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1248 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1254 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1260 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1262 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1268 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Surrogates		% Recovery	Recovery Limits	i	Flag/Qual				
Decachlorobiphenyl [1]		*	30-150		S-01			5/19/22 8:47	***************************************
Decachlorobiphenyl [2]		*	30-150		S-01			5/19/22 8:47	
Tetrachioro-m-xylene [1]		*	30-150		S-01			5/19/22 8:47	
Tetrachloro-m-xylene [2]		*	30-150		S-01			5/19/22 8:47	



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Sample Flags: O-32		Herbicides by GC/ECD								
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [2]	ND	140	12	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
2,4-DB [2]	ND	140	27	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
2,4,5-TP (Silvex) [2]	ND	14	1.5	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
2,4,5-T [2]	ND	14	1.9	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
Dalapon [2]	ND	340	21	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
Dicamba [2]	ND	14	1.9	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
Dichloroprop [2]	ND	140	26	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
MCPA [2]	ND	14000	2100	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
MCPP [2]	ND	14000	1800	μg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
Surrogates		% Reco	very	Recovery Limits	ì	Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		566	*	30-150		S-12			5/29/22 10:10	
2,4-Dichlorophenylacetic acid [2]		101		30-150					5/29/22 10:10	



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

	Analyte	Results	RL	Units	Dilution	Flag/Oual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)		2600	570	mg/Kg dry	50	1 Q Q	SW-846 8100 Modified	5/16/22	5/19/22 0:39	SFM
	Surrogates		% Recovery	Recovery Limits	5	Flag/Qual				
2-Fluorobiphe	nyl		*	40-140		S-01			5/19/22 0:39	



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01
Sample Matrix: Soil

Metals Analyses (Total)

	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
A	rinaryte				Diution	Triag/Quar				
Antimony		ND	2.2	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЈН
Arsenic		9.8	4.4	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЛН
Barium		82	2.2	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЛН
Beryllium		0.36	0.22	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЛН
Cadmium		0.47	0.44	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЛН
Chromium		24	0.89	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЈН
Lead		170	0.67	mg/Kg dry	1	M-10	SW-846 6010D	5/17/22	5/21/22 21:41	МЛН
Mercury		0.40	0.035	mg/Kg dry	1		SW-846 7471B	5/23/22	5/23/22 18:15	TDK
Nickel		24	0.89	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЛН
Selenium		ND	4.4	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЛН
Silver		ND	0.44	mg/Kg dry	1		SW-846 6010D	5/17/22	5/24/22 16:57	MJH
Thallium		ND	2.2	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЈН
Vanadium		160	0.89	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЈН
Zinc		160	0.89	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	МЛН



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01
Sample Matrix: Soil

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	73.0		% Wt	1		SM 2540G	5/20/22	5/21/22 10:16	BLS
Flashpoint	> 212 °F		°F	ı		SW-846 1010A-B	5/17/22	5/17/22 14:50	DET
pH @20.3°C	7.9		pH Units	1		SW-846 9045C	5/12/22	5/12/22 21:05	JEC
Reactive Cyanide	ND	3.9	mg/K.g	l		SW-846 9014	5/17/22	5/18/22 17:25	EC
Reactive Sulfide	ND	19	mg/Kg	I		SW-846 9030A	5/17/22	5/18/22 16:10	EC
Specific conductance	9.7	2.0	μmhos/cm	l		SM21-23 2510B Modified	5/14/22	5/14/22 13:00	EC

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: GP 3-5 (4-6ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-02
Sample Matrix: Soil

				e Organic Con						
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time	Å malust
Acetone	0.038	0.14	0.013	mg/Kg dry	l	J	SW-846 8260D	5/13/22	Analyzed 5/13/22 10:35	Analyst
tert-Amyl Methyl Ether (TAME)	ND	0.0014	0.00050	mg/Kg dry	l	,	SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Benzene	0.0011	0.0017	0.00030	mg/Kg dry	1	J	SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromobenzene	ND	0.0027	0.00073	mg/Kg dry	i	,	SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromochloromethane	ND	0.0027	0.0012	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromodichloromethane	ND	0.0027	0.0012	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromoform	ND	0.0027	0.00085	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromomethane	ND	0.014	0.0022	mg/Kg dry	1	V-34	SW-846 8260D	5/13/22	5/13/22 10:35	MFF
2-Butanone (MEK)	ND	0.055	0.0022	mg/Kg dry	1	1-54	SW-846 8260D	5/13/22	5/13/22 10:35	MFF
n-Butylbenzene	ND	0.0027	0.00080	mg/Kg dry	. 1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
sec-Butylbenzene	ND	0.0027	0.0013	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
tert-Butylbenzene	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0014	0.00068	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Carbon Disulfide	0.017	0.014	0.0096	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Carbon Tetrachloride	ND	0.0027	0.0012	mg/Kg dry	ı		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chlorobenzene	ND	0.0027	0.00081	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chlorodibromomethane	ND	0.0014	0.00078	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chloroethane	ND	0.027	0.0017	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chloroform	ND	0.0055	0.00080	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chloromethane	ND	0.014	0.0014	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
2-Chlorotoluene	ND	0.0027	0.00068	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
4-Chlorotoluene	ND	0.0027	0.00057	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0027	0.0012	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dibromoethane (EDB)	ND	0.0014	0.00092	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Dibromomethane	ND	0.0027	0.0010	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dichlorobenzene	ND	0.0027	0.00060	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,3-Dichlorobenzene	ND	0.0027	0.00068	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,4-Dichlorobenzene	ND	0.0027	0.00073	mg/Kg dry	I		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.027	0.0014	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1-Dichloroethane	ND	0.0027	0.00095	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dichloroethane	ND	0.0027	0.00090	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1-Dichloroethylene	ND	0.0055	0.00097	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
cis-1,2-Dichloroethylene	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
rans-1,2-Dichloroethylene	ND	0.0027	0.00092	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dichloropropane	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,3-Dichloropropane	ND	0.0014	0.00071	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
2,2-Dichloropropane	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1-Dichloropropene	ND	0.0027	0.0013	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
sis-1,3-Dichloropropene	ND	0.0014	0.00069	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
rans-1,3-Dichloropropene	ND	0.0014	0.00068	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Diethyl Ether	ND	0.027	0.00098	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Diisopropyl Ether (DIPE)	ND	0.0014	0.00078	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
,4-Dioxane	ND	0.14	0.049	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Ethylbenzene	ND	0.0027	0.00074	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: GP 3-5 (4-6ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-02 Sample Matrix: Soil

Volatile Organic C	ompounds b	ov GC/MS
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								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobutadiene	ND	0.0027	0.0010	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
2-Hexanone (MBK)	ND	0.027	0.0078	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Isopropylbenzene (Cumene)	ND	0.0027	0.00097	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0055	0.00049	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Methylene Chloride	ND	0.027	0.0020	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.027	0.0057	mg/Kg dry	I		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Naphthalene	ND	0.0055	0.00074	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
n-Propylbenzene	ND	0.0027	0.00065	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Styrene	ND	0.0027	0.00057	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1,1,2-Tetrachloroethane	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1,2,2-Tetrachloroethane	ND	0.0014	0.00071	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Tetrachloroethylene	ND	0.0027	0.00091	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Tetrahydrofuran	ND	0.014	0.0046	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Toluene	ND	0.0027	0.00071	mg/Kg dry	I		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2,3-Trichlorobenzene	ND	0.0027	0.00074	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2,4-Trichlorobenzene	ND	0.0027	0.00066	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1,1-Trichloroethane	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1,2-Trichloroethane	ND	0.0027	0.00063	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Trichloroethylene	ND	0.0027	0.00090	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Trichlorofluoromethane (Freon 11)	ND	0.014	0.00066	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2,3-Trichloropropane	ND	0.0027	0.0014	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2,4-Trimethylbenzene	ND	0.0027	0.00091	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,3,5-Trimethylbenzene	ND	0.0027	0.00072	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Vinyl Chloride	ND	0.014	0.00088	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
m+p Xylene	ND	0.0055	0.0018	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
o-Xylene	ND	0.0027	0.00059	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Surrogates		% Reco	very :	Recovery Limit	s	Flag/Qual				
1,2-Dichloroethane-d4		10.4	*	70-130		S-17			5/13/22 10:35	
Toluene-d8		95.2		70-130					5/13/22 10:35	



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: GP 3-5 (4-6ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-02
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		73.0		% Wt	1		SM 2540G	5/20/22	5/25/22 12:36	ЛC



#### Sample Extraction Data

		Sample Extraction	Data		
Prep Method: % Solids Analytical Method:	SM 2540G				
Lab Number [Field ID]	Batch			Date	
22E0834-01 [Comp #1 (2-10ft)]	B308891			05/20/22	
22E0834-02 [GP 3-5 (4-6ft)]	B308891			05/20/22	
SM21-23 2510B Modified					
Lab Number [Field ID]	Batch	Initial (g)		Date	
22E0834-01 [Comp #1 (2-10ft)]	B308429	1.00		05/14/22	
SW-846 1010A-B					
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B308571	50.0	50.0	05/17/22	
Prep Method: SW-846 3050B Analytical Me	thod: SW-846 6010D				
Lab Number [Field ID]	Batch	Initial (g)	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B308621	1.54	50.0	05/17/22	· · · · · · · · · · · · · · · · · · ·
ep Method: SW-846 7471 Analytical Method: SW-846 ID]	nod: SW-846 7471B Batch	Initial [g]	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B309067	0.581	50.0	05/23/22	
Prep Method: SW-846 3546 Analytical Meth	nod: SW-846 8081B				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B308354	10.0	10.0	05/13/22	
Prep Method: SW-846 3546 Analytical Meth	od: SW-846 8082A				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B308353	10.0	10.0	05/13/22	
Prep Method: SW-846 3546 Analytical Meth	od: SW-846 8100 Modified				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B308525	30.0	1.00	05/16/22	
Prep Method: SW-846 8151 Analytical Meth	od: SW-846 8151A				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
E0834-01 [Comp #1 (2-10ft)]	B309280	20.0	5.00	05/25/22	



#### Sample Extraction Data

Prep Method: SW-846 5035

Analytical Method: SW-846 8260D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
22E0834-02 [GP 3-5 (4-6ft)]	B308386	5.00	10.0	05/13/22	
Prep Method: SW-846 3546 Analytical Met	nod: SW-846 8270E				
Lab Number [Field ID]	Batch	Initial (g)	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B308526	30.1	1.00	05/16/22	
SW-846 9014					
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B308564	25.7	250	05/17/22	
SW-846 9030A					
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
22E0834-01 [Comp #1 (2-10ft)]	B308563	25.7	250	05/17/22	

ab Number [Field ID]	Batch	Initial [g]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308341	20.0	05/12/22



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308386 - SW-846 5035										
Blank (B308386-BLK1)				Prepared & A	Analyzed: 05	/13/22				
Acetone	ND	0.10	mg/Kg wet			314111-0-10-0				
ert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							V-34
-Butanone (MEK)	ND	0.040	mg/Kg wet							
a-Butylbenzene	ND	0.0020	mg/Kg wet							
ec-Butylbenzene	ND	0.0020	mg/Kg wet							
ert-Butylbenzene	ND	0.0020	mg/Kg wet							
ert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.010	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane Chloroform	ND	0.020	mg/Kg wet							
niororom Chloromethane	ND	0.0040	mg/Kg wet							
Chlorotoluene	ND	0.010 0.0020	mg/Kg wet							
-Chlorotoluene	ND ND	0.0020	mg/Kg wet mg/Kg wet							
,2-Dibromo-3-chloropropane (DBCP)	ND ND	0.0020	mg/Kg wet							
,2-Dibromoethane (EDB)	ND ND	0.0010	mg/Kg wet							
Dibromomethane	ND ND	0.0010	mg/Kg wet							
,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
richlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1-Dichloroethane	ND	0.0020	mg/Kg wet							
2-Dichloroethane	ND	0.0020	mg/Kg wet							
1-Dichloroethylene	ND	0.0040	mg/Kg wet							
s-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
ans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
2-Dichloropropane	ND	0.0020	mg/Kg wet							
3-Dichloropropane	ND	0.0010	mg/Kg wet							
2-Dichloropropane	ND	0.0020	mg/Kg wet							
1-Dichloropropene	ND	0.0020	mg/Kg wet							
s-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
ans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
iethyl Ether	ND	0.020	mg/Kg wet							
iisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
4-Dioxane	ND	0.10	mg/Kg wet							
hylbenzene	ND	0.0020	mg/Kg wet							
exachlorobutadiene	ND	0.0020	mg/Kg wet							
Hexanone (MBK)	ND	0.020	mg/Kg wet							
opropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
ethyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
ethylene Chloride	ND	0.020	mg/Kg wet							
Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							



Batch B308386 - SW-846 5035			Units	Level	Result	%REC	Limits	RPD	Limit	Notes	_
Blank (B308386-BLK1)				Prepared & A	nalyzed: 05	/13/22					
n-Propylbenzene	ND	0.0020	mg/Kg wet								
Styrene	ND	0.0020	mg/Kg wet								
,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet								
,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet								
Tetrachloroethylene	ND	0.0020	mg/Kg wet								
Tetrahydrofuran	ND	0.010	mg/Kg wet								
Coluene	ND	0.0020	mg/Kg wet								
,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet								
,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet								
,1,1-Trichloroethane	ND	0.0020	mg/Kg wet								
,1,2-Trichloroethane	ND	0.0020	mg/Kg wet								
Trichloroethylene	ND	0.0020	mg/Kg wet								
richlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet								
,2,3-Trichloropropane	ND	0.0020	mg/Kg wet								
,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet								
,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet								
/inyl Chloride	ND	0.010	mg/Kg wet								
n+p Xylene	ND	0.0040	mg/Kg wet								
-Xylene	ND	0.0020	mg/Kg wet								
urrogate: 1,2-Dichloroethane-d4	0.0549		mg/Kg wet	0.0500		110	70-130				
rrogate: Toluene-d8	0.0488		mg/Kg wet	0.0500		97.6	70-130				
urrogate: 4-Bromofluorobenzene	0.0486		mg/Kg wet	0.0500		97.3	70-130				
.CS (B308386-BS1)			1	Prepared & A	.nalyzed: 05	/13/22					
cetone	0.228	0.10	mg/Kg wet	0.200		114	40-160				_
ert-Amyl Methyl Ether (TAME)	0.0225	0.0010	mg/Kg wet	0.0200		113	70-130				
enzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130				
romobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130				
romochloromethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130				
romodichloromethane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130				
romoform	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130				
romomethane	0.0225	0.010	mg/Kg wet	0.0200		113	40-160			V-34	
-Butanone (MEK)	0.247	0.040	mg/Kg wet	0.200		124	40-160			V-36	
-Butylbenzene	0.0211	0.0020	mg/Kg wet	0.0200		105	70-130				
ec-Butylbenzene	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130				
rt-Butylbenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130				
rt-Butyl Ethyl Ether (TBEE)	0.0189	0.0010	mg/Kg wet	0.0200		94.3	70-130				
arbon Disulfide	0.218	0.010	mg/Kg wet	0.200		109	70-130				
arbon Tetrachloride	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130				
hlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130				
hlorodibromomethane	0.0211	0.0010	mg/Kg wet	0.0200		105	70-130				
hloroethane	0.0211	0.020	mg/Kg wet	0.0200		106	70-130				
hloroform	0.0206	0.0040	mg/Kg wet	0.0200		103	70-130				
hloromethane	0.0200	0.010	mg/Kg wet	0.0200		106	40-160				
Chlorotoluene	0.0211	0.0020	mg/Kg wet	0.0200		104	70-130				
Chlorotoluene		0.0020	mg/Kg wet	0.0200		104	70-130				
2-Dibromo-3-chloropropane (DBCP)	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130				
2-Dibromoethane (EDB)	0.0216	0.0020	mg/Kg wet				70-130				
bromomethane (EDB)	0.0208			0.0200		104					
	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130				
2-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200		98.9	70-130				
3-Dichlorobenzene	0.0196	0.0020	mg/Kg wet mg/Kg wet	0.0200		97.8	70-130				



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B308386 - SW-846 5035											
LCS (B308386-BS1)				Prepared & A	Analyzed: 05/	13/22					
Dichlorodifluoromethane (Freon 12)	0.0176	0.020	mg/Kg wet	0.0200		88.1	40-160			J	
1,1-Dichloroethane	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130				
1,2-Dichloroethane	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130				
1,1-Dichloroethylene	0.0207	0.0040	mg/Kg wet	0.0200		103	70-130				
cis-1,2-Dichloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.6	70-130				
trans-1,2-Dichloroethylene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130				
1,2-Dichloropropane	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130				
1,3-Dichloropropane	0.0211	0.0010	mg/Kg wet	0.0200		105	70-130				
2,2-Dichloropropane	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130				
1,1-Dichloropropene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130				
cis-1,3-Dichloropropene	0.0210	0.0010	mg/Kg wet	0.0200		105	70-130				
trans-1,3-Dichloropropene	0.0185	0.0010	mg/Kg wet	0.0200		92.6	70-130				
Diethyl Ether	0.0199	0.020	mg/Kg wet	0.0200		99.5	70-130			J	
Diisopropyl Ether (DIPE)	0.0201	0.0010	mg/Kg wet	0.0200		101	70-130			-	
1,4-Dioxane	0.200	0.10	mg/Kg wet	0.200		100	40-160				
Ethylbenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130				
Hexachlorobutadiene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130				
2-Hexanone (MBK)	0.242	0.020	mg/Kg wet	0.200		121	40-160			V-36	
Isopropylbenzene (Cumene)	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			, 20	
p-Isopropyltoluene (p-Cymene)	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130				
ethyl tert-Butyl Ether (MTBE)	0.0199	0.0040	mg/Kg wet	0.0200		99.4	70-130				
Aethylene Chloride	0.0200	0.020	mg/Kg wet	0.0200		100	70-130				
4-Methyl-2-pentanone (MIBK)	0.235	0.020	mg/Kg wet	0.200		118	40-160				1
Naphthalene	0.0206	0.0040	mg/Kg wet	0.0200		103	70-130				
n-Propylbenzene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130				
Styrene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130				
1,1,1,2-Tetrachloroethane	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130				
1,1,2,2-Tetrachloroethane	0.0210	0.0010	mg/Kg wet	0.0200		105	70-130				
Tetrachloroethylene	0.0198	0.0020	mg/Kg wet	0.0200		99.1	70-130				
Tetrahydrofuran	0.0205	0.010	mg/Kg wet	0.0200		102	70-130				
Toluene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130				
1,2,3-Trichlorobenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130				
1,2,4-Trichlorobenzene	0.0182	0.0020	mg/Kg wet	0.0200		90.8	70-130				
1,1,1-Trichloroethane	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130				
1,1,2-Trichloroethane	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130				
Trichloroethylene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130				
Trichlorofluoromethane (Freon 11)	0.0218	0.010	mg/Kg wet	0.0200		109	70-130				
1,2,3-Trichloropropane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130				
1,2,4-Trimethylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130				
1,3,5-Trimethylbenzene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130				
Vinyl Chloride	0.0214	0.010	mg/Kg wet	0.0200		107	70-130				
n+p Xylene	0.0420	0.0040	mg/Kg wet	0.0400		105	70-130				
o-Xylene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0505		mg/Kg wet	0.0500		101	70-130				
Surrogate: Toluene-d8	0.0506		mg/Kg wet	0.0500		101	70-130				
Surrogate: 4-Bromofluorobenzene	0.0488		mg/Kg wet	0.0500		97.6	70-130				



#### Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308386 - SW-846 5035		·····								
LCS Dup (B308386-BSD1)				Prepared &	Analyzed: 05	/13/22				
Acetone	0.229	0.10	mg/Kg wet	0.200		115	40-160	0.534	20	
ert-Amyl Methyl Ether (TAME)	0.0227	0.0010	mg/Kg wet	0.0200		114	70-130	0.972	20	
Benzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	0.794	20	
Bromobenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	0.964	20	
Bromochloromethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	0.00	20	
Bromodichloromethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	1.34	20	
Bromoform	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	1.89	20	
Bromomethane	0.0223	0.010	mg/Kg wet	0.0200		112	40-160	0.891	20	V-34
-Butanone (MEK)	0.254	0.040	mg/Kg wet	0.200		127	40-160	2.83	20	V-36
-Butylbenzene	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130	0.571	20	
ec-Butylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	0.495	20	
ert-Butylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	1.40	20	
ert-Butyl Ethyl Ether (TBEE)	0.0185	0.0010	mg/Kg wet	0.0200		92.6	70-130	1.82	20	
arbon Disulfide	0.214	0.010	mg/Kg wet	0.200		107	70-130	2.06	20	
Carbon Tetrachloride	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	0.497	20	
hlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	0.815	20	
hlorodibromomethane	0.0210	0.0010	mg/Kg wet	0.0200		105	70-130	0.0950	20	
hloroethane	0.0210	0.020	mg/Kg wet	0.0200		105	70-130	0.853	20	
hloroform	0.0205	0.0040	mg/Kg wet	0.0200		102	70-130	0.487	20	
hloromethane	0.0208	0.010	mg/Kg wet	0.0200		104	40-160	1.53	20	
Chlorotolucne	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130	0.481	20	
Chlorotoluene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130	0.0966	20	
2-Dibromo-3-chloropropane (DBCP)	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130	1.10	20	
2-Dibromoethane (EDB)	0.0209	0.0010	mg/Kg wet	0.0200		104	70-130	0.288	20	
ibromomethane	0.0215	0.0020	mg/Kg wet	0.0200		107	70-130	1.60	20	
2-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130	0.101	20	
3-Dichlorobenzene	0.0194	0.0020	mg/Kg wet	0.0200		97.0	70-130	0.821	20	
4-Dichlorobenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130	0.104	20	
ichlorodifluoromethane (Freon 12)	0.0174	0.020	mg/Kg wet	0.0200		87.2	40-160	1.03	20	J
1-Dichloroethane	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130	0.0956	20	
2-Dichloroethane	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	0.494	20	
1-Dichloroethylene	0.0204	0.0040	mg/Kg wet	0.0200		102	70-130	1.07	20	
s-1,2-Dichloroethylene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130	1.21	20	
ans-1,2-Dichloroethylene	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130	3.48	20	
2-Dichloropropane	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130	1.48	20	
3-Dichloropropane	0.0213	0.0010	mg/Kg wet	0.0200		107	70-130	1.32	20	
2-Dichloropropane	0.0194	0.0020	mg/Kg wet	0.0200		97.0	70-130	4.24	20	
1-Dichloropropene	0.0198	0.0020	mg/Kg wet	0.0200		99.1	70-130	1.30	20	
s-1,3-Dichloropropene	0.0211	0.0010	mg/Kg wet	0.0200		106	70-130	0.380	20	
ns-1,3-Dichloropropene	0.0186	0.0010	mg/Kg wet	0.0200		93.0	70-130	0.431	20	
ethyl Ether	0.0200	0.020	mg/Kg wet	0.0200		100	70-130	0.701	20	
isopropyl Ether (DIPE)	0.0197	0.0010	mg/Kg wet	0.0200		98.7	70-130	1.91	20	
4-Dioxane	0.236	0.10	mg/Kg wet	0.200		118	40-160	16.2	20	V-16
nylbenzene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130	0.587	20	
exachlorobutadiene	0.0185	0.0020	mg/Kg wet	0.0200		92.3	70-130	2.36	20	
Hexanone (MBK)	0.247	0.020	mg/Kg wet	0.200		123	40-160	2.04	20	V-36
propylbenzene (Cumene)	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	0.0992	20	
(sopropyltoluene (p-Cymene)	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	1.68	20	
ethyl tert-Butyl Ether (MTBE)	0.0198	0.0040	mg/Kg wet	0.0200		99.2	70-130	0.201	20	
ethylene Chloride	0.0199	0.020	mg/Kg wet	0.0200		99.5	70-130	0.501	20	J
Methyl-2-pentanone (MIBK)	0.240	0.020	mg/Kg wet	0.200		120	40-160	2.20	20	
phthalene	0.0205	0.0040	mg/Kg wet	0.0200		102	70-130	0.584	20	

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#### QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308386 - SW-846 5035							· · · · · · · · · · · · · · · · · · ·			
LCS Dup (B308386-BSD1)				Prepared & A	Analyzed: 05/	13/22				
n-Propylbenzene	0.0207	0.0020	mg/Kg wet	0.0200	h	104	70-130	0.290	20	
Styrene	0.0211	0.0020	mg/Kg wet	0.0200		105	70-130	0.381	20	
1,1,1,2-Tetrachloroethane	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130	0.970	20	
1,1,2,2-Tetrachloroethane	0.0216	0.0010	mg/Kg wet	0.0200		108	70-130	3.19	20	
Tetrachloroethylene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	1.42	20	
Tetrahydrofuran	0.0206	0.010	mg/Kg wet	0.0200		103	70-130	0.682	20	
Toluene	0.0226	0.0020	mg/Kg wet	0.0200		113	70-130	10.1	20	
1,2,3-Trichlorobenzene	0.0186	0.0020	mg/K.g wet	0.0200		93.0	70-130	0.536	20	
1,2,4-Trichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200		89.9	70-130	0.996	20	
1,1,1-Trichloroethane	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	1.50	20	
1,1,2-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	1.66	20	
Trichloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.6	70-130	0.800	20	
Trichlorofluoromethane (Freon 11)	0.0219	0.010	mg/Kg wet	0.0200		109	70-130	0.550	20	
1,2,3-Trichloropropane	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130	1.87	20	
1,2,4-Trimethylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	1.86	20	
1,3,5-Trimethylbenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	0.675	20	
Vinyl Chloride	0.0212	0.010	mg/Kg wet	0.0200		106	70-130	0.563	20	
m+p Xylene	0.0420	0.0040	mg/Kg wet	0.0400		105	70-130	0.143	20	
o-Xylene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130	0.195	20	
Surrogate: 1,2-Dichloroethane-d4	0.0495		mg/Kg wet	0.0500		99.0	70-130			
rrogate: Toluene-d8	0.0503		mg/Kg wet	0.0500		101	70-130			
surrogate: 4-Bromofluorobenzene	0.0489		mg/Kg wet	0.0500		97.9	70-130			



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308526 - SW-846 3546										
Blank (B308526-BLK1)			<u> </u>	Prepared: 05/	/16/22 Analy:	zed: 05/18/22	2			
Biphenyl	ND	0.67	mg/Kg wet							
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							V-05
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet						•	
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene Bis(2-chloroethoxy)methane	ND	0.17	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							<b>4.</b> - ·
Bis(2-chloroisopropyl)ether Bis(2-Ethylhexyl)phthalate	ND	0.34 0.34	mg/Kg wet							V-05
Bis(2-Ethylhexyl)phthalate 4-Bromophenylphenylether	ND ND	0.34 0.34	mg/Kg wet mg/Kg wet							
4-Bromophenylphenylether Butylbenzylphthalate	ND ND	0.34 0.34	mg/Kg wet mg/Kg wet							
4-Chloroaniline	ND ND	0.34 0.66	mg/Kg wet mg/Kg wet							V 24
4-Chloronaphthalene	ND ND	0.66 0.34	mg/Kg wet mg/Kg wet							V-34
2-Chlorophenol	ND ND	0.34	mg/Kg wet							
rysene	ND ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND		mg/Kg wet							
2,4-Dinitrophenol	ND		mg/Kg wet							R-05
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND		mg/Kg wet							
1,2-Diphenylhydrazine/Azobenzene	ND		mg/Kg wet							
Fluoranthene	ND		mg/Kg wet							
Fluorene	ND		mg/Kg wet							
Hexachlorobutadiana	ND		mg/Kg wet							
Hexachloroethane	ND		mg/Kg wet							
Hexachloroethane	ND		mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND		mg/Kg wet							
Isophorone 2-Methylnaphthalene	ND		mg/Kg wet							
2-Methylnaphthalene 2-Methylphenol	ND		mg/Kg wet							
2-Methyiphenol 3/4-Methylphenol	ND		mg/Kg wet							
3/4-Methylphenol Naphthalene	ND		mg/Kg wet mg/Kg wet							
Naphthalene trobenzene	ND									
Nitrophenol	ND		mg/Kg wet mg/Kg wet							
. Nitrophenol 4-Nitrophenol	ND ND		mg/Kg wet mg/Kg wet							
4-Nitrophenol Pentachlorophenol	ND ND		mg/Kg wet mg/Kg wet							
	ND	0.34	NG WCI							



#### QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308526 - SW-846 3546										V
lank (B308526-BLK1)			1	Prepared: 05	/16/22 Analy	yzed: 05/18/2	.2			
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
yrene	ND	0.17	mg/Kg wet							
yridine	ND	0.34	mg/Kg wet							
2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
urrogate: 2-Fluorophenol	3.57		mg/Kg wet	6.67		53.5	30-130			
urrogate: Phenol-d6	3.50		mg/Kg wet	6.67		52.5	30-130			
urrogate: Nitrobenzene-d5	1.76		mg/Kg wet	3.33		52.8	30-130			
urrogate: 2-Fluorobiphenyl	2.31		mg/Kg wet	3.33		69.2	30-130			
arrogate: 2,4,6-Tribromophenol	4.96		mg/Kg wet	6.67		74.4	30-130			
arrogate: p-Terphenyl-d14	2.09		mg/Kg wet	3.33		62.8	30-130			
				December 05	/16/22 Analy		,,			
CS (B308526-BS1) phenyl		0.67	mg/Kg wet		/16/22 Analy		40-140			
rpnenyi cenaphthene	1.15	0.67	mg/Kg wet	1.67		69.3	40-140 40-140			
cenaphthylene	1.02	0.17	mg/Kg wet mg/Kg wet	1.67 1.67		61.1 63.8	40-140 40-140			
cetophenone	1.06	0.17	mg/Kg wet			56.1				
niline	0.935	0.34	mg/Kg wet	1.67		49.3	40-140 40-140			V-05
nthracene	0.822	0.17	mg/Kg wet	1.67			40-140			V-U3
nzo(a)anthracene	1.15	0.17	mg/Kg wet	1.67		69.1	40-140			
enzo(a)pyrene	1.09	0.17	mg/Kg wet	1.67		65.5	40-140			
enzo(b)fluoranthene	1.13	0.17	mg/Kg wet	1.67 1.67		68.1 69.3	40-140			
enzo(g,h,i)perylene	1.16	0.17	mg/Kg wet	1.67		66.9	40-140			
enzo(k)fluoranthene	1.11	0.17	mg/Kg wet	1.67		75.6	40-140			
s(2-chloroethoxy)methane	1.26	0.34	mg/Kg wet	1.67		57.5	40-140			
s(2-chloroethyl)ether	0.958	0.34	mg/Kg wet	1.67		43.6	40-140			
s(2-chloroisopropyl)ether	0.727	0.34	mg/Kg wet	1.67		42.8	40-140			V-05
s(2-Ethylhexyl)phthalate	0.713	0.34	mg/Kg wet	1.67		59.9	40-140			V-03
Bromophenylphenylether	0.998	0.34	mg/Kg wet	1.67		70.5	40-140			
itylbenzylphthalate	1.17	0.34	mg/Kg wet	1.67			40-140			
Chloroaniline	0.946	0.66	mg/Kg wet			56.8				37.24
Chloronaphthalene	0.941	0.34	mg/Kg wet	1.67		56.5	15-140 40-140			V-34
Chlorophenol	0.955	0.34	mg/Kg wet	1.67		57.3 56.6	40-140 30-130			
	0.943	0.34	mg/Kg wet	1.67		56.6 67.2	30-130 40-140			
rrysene benz(a,h)anthracene	1.12		mg/Kg wet	1.67						
benzofuran	1.14	0.17 0.34	mg/Kg wet	1.67		68.5 71.2	40-140			
	1.19	0.34	mg/Kg wet	1.67		71.2 60.0	40-140			
-n-butylphthalate 2-Dichlorobenzene	1.00	0.34	mg/Kg wet mg/Kg wet	1.67		60.0	40-140 40-140			
2-Dichlorobenzene 3-Dichlorobenzene	0.935			1.67		56.1				
3-Dichlorobenzene	0.901	0.34	mg/Kg wet	1.67		54.1 55.6	40-140			
	0.926	0.34	mg/Kg wet	1.67		55.6 57.7	40-140			
-Dichlorobenzidine	0.961	0.17 0.34	mg/Kg wet mg/Kg wet	1.67		57.7 64.4	40-140			
-Dichlorophenol	1.07			1.67		64.4 57.0	30-130			
ethylphthalate	0.965	0.34	mg/Kg wet	1.67		57.9	40-140			
l-Dimethylphenol	1.02	0.34	mg/Kg wet	1.67		61.4	30-130			
methylphthalate	1.06	0.34	mg/Kg wet	1.67		63.7	40-140			n 05 -
I-Dinitrophenol	0.572	0.66	mg/Kg wet	1.67		34.3	15-140			R-05, J
I-Dinitrotoluene	1.16	0.34	mg/Kg wet	1.67		69.4	40-140			
-Dinitrotoluene	1.20	0.34	mg/Kg wet	1.67		71.9	40-140			
-n-octylphthalate	0.958	0.34	mg/Kg wet	1.67		57.5	40-140			



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308526 - SW-846 3546										
LCS (B308526-BS1)				Prepared: 05	/16/22 Analy	yzed: 05/18/2	2			
Fluoranthene	1.11	0.17	mg/Kg wet	1.67		66.4	40-140			
Fluorene	1.15	0.17	mg/Kg wet	1.67		69.1	40-140			
Hexachlorobenzene	1.24	0.34	mg/Kg wet	1.67		74.1	40-140			
Hexachlorobutadiene	1.08	0.34	mg/Kg wet	1.67		64.9	40-140			
Hexachloroethane	0.828	0.34	mg/Kg wet	1.67		49.7	40-140			
ndeno(1,2,3-cd)pyrene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140			
sophorone	0.962	0.34	mg/Kg wet	1.67		57.7	40-140			
-Methylnaphthalene	1.17	0.17	mg/Kg wet	1.67		70.1	40-140			
-Methylphenol	0.972	0.34	mg/Kg wet	1.67		58.3	30-130			
i/4-Methylphenol	0.990	0.34	mg/Kg wet	1.67		59.4	30-130			
Vaphthalene	1.02	0.17	mg/Kg wet	1.67		61.3	40-140			
Vitrobenzene	0.872	0.34	mg/Kg wet	1.67		52.3	40-140			
-Nitrophenol	0.978	0.34	mg/Kg wet	1.67		58.7	30-130			
I-Nitrophenol	0.907	0.66	mg/Kg wet	1.67		54.4	15-140			
Pentachlorophenol	0.917	0.34	mg/Kg wet	1.67		55.0	30-130			
Phenanthrene	1.15	0.17	mg/Kg wet	1.67		68.9	40-140			
Phenol	0.918	0.34	mg/Kg wet	1.67		55.1	15-140			
Pyrene	1.07	0.17	mg/Kg wet	1.67		64.I	40-140			
Pyridine	0.514	0.34	mg/Kg wet	1.67		30.9	30-140			
,2,4-Trichlorobenzene	1.05	0.34	mg/Kg wet	1.67		63.1	40-140			
4,5-Trichlorophenol	1.03	0.34	mg/Kg wet	1.67		70.1	30-130			
,4,6-Trichlorophenol		0.34	mg/Kg wet	1.67		67.7	30-130			
	1.13 4.20	0.5 1		6.67		62.9	30-130			
Surrogate: 2-Fluorophenol Surrogate: Phenol-d6	4.20		mg/Kg wet mg/Kg wet	6.67		62.9	30-130			
Surrogate: Nitrobenzene-d5	1.86		mg/Kg wet	3.33		55.7	30-130			
surrogate: 2-Fluorobiphenyl	2.49		mg/Kg wet	3.33		74.8	30-130			
Surrogate: 2,4,6-Tribromophenol	5.52		mg/Kg wet	6.67		82.9	30-130			
Surrogate: p-Terphenyl-d14	2.34		mg/Kg wet	3.33		70.2	30-130			
	<del></del> .		• •							
CS Dup (B308526-BSD1)					/16/22 Analy					
liphenyl	1.21	0.67	mg/Kg wet	1.67		72.5	40-140	4.54	20	
cenaphthene	1.05	0.17	mg/Kg wet	1.67		63.3	40-140	3.57	30	
cenaphthylene	1.09	0.17	mg/Kg wet	1.67		65.2	40-140	2.26	30	
Acetophenone	1.02	0.34	mg/Kg wet	1.67		61.0	40-140	8.33	30	
Aniline	0.745	0.34	mg/Kg wet	1.67		44.7	40-140	9.83	30	V-05
nthracene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140	1.78	30	
enzo(a)anthracene	1.11	0.17	mg/Kg wet	1.67		66.5	40-140	1.52	30	
enzo(a)pyrene	1.13	0.17	mg/Kg wet	1.67		67.7	40-140	0.560	30	
enzo(b)fluoranthene	1.16	0.17	mg/Kg wet	1.67		69.7	40-140	0.604	30	
enzo(g,h,i)perylene	1.15	0.17	mg/Kg wet	1.67		69.2	40-140	3.35	30	
enzo(k)fluoranthene	1.25	0.17	mg/Kg wet	1.67		74.8	40-140	1.06	30	
is(2-chloroethoxy)methane	1.00	0.34	mg/Kg wet	1.67		60.3	40-140	4.72	30	
is(2-chloroethyl)ether	0.799	0.34	mg/Kg wet	1.67		47.9	40-140	9.44	30	
is(2-chloroisopropyl)ether	0.829	0.34	mg/Kg wet	1.67		49.7	40-140	15.0	30	V-05
is(2-Ethylhexyl)phthalate	1,05	0.34	mg/Kg wet	1.67		63.3	40-140	5.55	30	
Bromophenylphenylether	1.19	0.34	mg/Kg wet	1.67		71.5	40-140	1.52	30	
utylbenzylphthalate	0.937	0.34	mg/Kg wet	1.67		56.2	40-140	1.03	30	
Chloroaniline	0.869	0.66	mg/Kg wet	1.67		52.1	15-140	7.96	30	V-34
Chloronaphthalene	1.01	0.34	mg/Kg wet	1.67		60.8	40-140	5.86	30	
Chlorophenol	0.995	0.34	mg/Kg wet	1.67		59.7	30-130	5.37	30	
hrysene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140	2.32	30	
Pibenz(a,h)anthracene	1.13	0.17	mg/Kg wet	1.67		67.6	40-140	1.38	30	



#### QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B308526 - SW-846 3546	Acount	Dillit	Omis	Level	Result	70REC	Limits	NA D	Liiiit	140162	
LCS Dup (B308526-BSD1)			,	Dramandi 06	i/16/22 Analy	d- 05/19/	22				
Dibenzofuran	1,21	0.34	mg/Kg wet	1.67	710/22 Allaly	72.8	40-140	2.25	30		
Di-n-butylphthalate	1.06	0.34	mg/Kg wet	1.67		63.3	40-140	5.42	30		
1,2-Dichlorobenzene	1.02	0.34	mg/Kg wet	1.67		61.0	40-140	8.40	30		
1,3-Dichlorobenzene	1.02	0.34	mg/Kg wet	1.67		60.4	40-140	11.1	30		
1,4-Dichlorobenzene	1.02	0.34	mg/Kg wet	1.67		60.9	40-140	9.17	30		
3,3-Dichlorobenzidine	0.867	0.17	mg/Kg wet	1.67		52.0	40-140	10.3	30		
2,4-Dichlorophenol	1.09	0.34	mg/Kg wet	1.67		65.4	30-130	1.54	30		
Diethylphthalate	1.01	0.34	mg/Kg wet	1.67		60.5	40-140	4.46	30		
2,4-Dimethylphenol	1.06	0.34	mg/Kg wet	1.67		63.5	30-130	3.36	30		
Dimethylphthalate	1.05	0.34	mg/Kg wet	1.67		63.1	40-140	0.977	30		
2,4-Dinitrophenol	0.367	0.66	mg/Kg wet	1.67		22.0	15-140	43.6		R-05, J	ŧ
2,4-Dinitrotoluene	1,17	0.34	mg/Kg wet	1.67		70.4	40-140	1.37	30	K-05, 5	,
2,6-Dinitrotoluene	1.20	0.34	mg/Kg wet	1.67		72.0	40-140	0.167	30		
Di-n-octylphthalate	0.985	0.34	mg/Kg wet	1.67		59.1	40-140	2.71	30		
1,2-Diphenylhydrazine/Azobenzene	1.00	0.34	mg/Kg wet	1.67		60,2	40-140	4.03	30		
Fluoranthene	1.16	0.17	mg/Kg wet	1.67		69.6	40-140	4.73	30		
Fluorene	1.18	0.17	mg/Kg wet	1.67		70.7	40-140	2.23	30		
Hexachlorobenzene	1.24	0.34	mg/Kg wet	1.67		74.6	40-140	0.699	30		
Hexachlorobutadiene	1.15	0.34	mg/Kg wet	1.67		68.9	40-140	6.01	30		
Hexachloroethane	0.958	0.34	mg/Kg wet	1.67		57.5	40-140	14.6	30		
deno(1,2,3-cd)pyrene	1.11	0.17	mg/Kg wet	1.67		66.5	40-140	3.40	30		
sophorone	1.08	0.34	mg/Kg wet	1.67		64.5	40-140	11.2	30		
2-Methylnaphthalene	1.24	0.17	mg/Kg wet	1.67		74.1	40-140	5.49	30		
2-Methylphenol	1.03	0.34	mg/Kg wet	1.67		61.9	30-130	5.89	30		
3/4-Methylphenol	1.01	0.34	mg/Kg wet	1.67		60.9	30-130	2.46	30		
Naphthalene	1.09	0.17	mg/Kg wet	1.67		65.5	40-140	6.56	30		
Nitrobenzene	0.969	0.34	mg/Kg wet	1.67		58.1	40-140	10.5	30		
2-Nitrophenol	1.07	0.34	mg/Kg wet	1.67		63.9	30-130	8.61	30		
4-Nitrophenol	0.904	0.66	mg/Kg wet	1.67		54.3	15-140	0.258	30		†
Pentachlorophenol	0.924	0.34	mg/Kg wet	1.67		55.4	30-130	0.760	30		
Phenanthrene	1.17	0.17	mg/Kg wet	1.67		70.2	40-140	1.75	30		
Phenol	0.952	0.34	mg/Kg wet	1.67		57.1	15-140	3.64	30		t
Pyrene	1.11	0.17	mg/Kg wet	1.67		66.7	40-140	4.07	30		
Pyridine	0.667	0.34	mg/Kg wet	1.67		40.0	30-140	25.8	30		t
1,2,4-Trichlorobenzene	1.14	0.34	mg/Kg wet	1.67		68.6	40-140	8.29	30		
2,4,5-Trichlorophenol	1.17	0.34	mg/Kg wet	1.67		70.5	30-130	0.455	30		
2,4,6-Trichlorophenol	1.14	0.34	mg/Kg wet	1.67		68.6	30-130	1.35	30		
Surrogate: 2-Fluorophenol	4.36		mg/Kg wet	6.67		65.4	30-130				
Surrogate: Phenol-d6	4.26		mg/Kg wet	6.67		63.8	30-130				
Surrogate: Nitrobenzene-d5	2.08		mg/Kg wet	3.33		62.5	30-130				
Surrogate: 2-Fluorobiphenyl	2.55		mg/Kg wet	3.33		76.6	30-130				
Surrogate: 2,4,6-Tribromophenol	5.38		mg/Kg wet	6.67		80.8	30-130				
Surrogate: p-Terphenyl-d14	2.34		mg/Kg wet	3.33		70.3	30-130				



#### Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Unite	Spike	Source	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308354 - SW-846 3546	Vesuu	Limit	Units	Level	Result	/OKEC	rmin?	TAD.	Limit	Notes
Blank (B308354-BLK1)			1	Prepared: 05/	13/22 Anal	yzed: 05/18/22	2			
Aldrin	ND	0.0050	mg/Kg wet	roparoa. os.	13.22 1 11111	, 20a. 05, 10, 2.	-			
Aldrin [2C]	ND	0.0050	mg/Kg wet							
alpha-BHC	ND	0.0050	mg/Kg wet							
alpha-BHC [2C]	ND	0.0050	mg/Kg wet							
beta-BHC	ND	0.0050	mg/Kg wet							
beta-BHC [2C]	ND	0.0050	mg/Kg wet							
delta-BHC	ND	0.0050	mg/Kg wet							
delta-BHC [2C]	ND	0.0050	mg/Kg wet							
gamma-BHC (Lindane)	ND ND	0.0020	mg/Kg wet							
gamma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
Chlordane		0.020	mg/Kg wet							
Chlordane [2C]	ND	0.020	mg/Kg wet							
4,4'-DDD	ND	0.0040	mg/Kg wet							
4,4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDE	ND	0.0040	mg/Kg wet							
	ND									
4,4'-DDE [2C]	ND	0.0040	mg/Kg wet							
1,4'-DDT	ND	0.0040	mg/Kg wet							
1,4'-DDT [2C]	ND	0.0040	mg/Kg wet							
Dieldrin	ND	0.0040	mg/Kg wet							
Dieldrin [2C]	ND	0.0040	mg/Kg wet							
dosulfan I	ND	0.0050	mg/Kg wet							
endosulfan I [2C]	ND	0.0050	mg/Kg wet							
Endosulfan II	ND	0.0080	mg/Kg wet							
Endosulfan II [2C]	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
Endrin	ND	0.0080	mg/Kg wet							
Endrin [2C]	ND	0.0080	mg/Kg wet							
Endrin Aldehyde	ND	0.0080	mg/Kg wet							
Endrin Aldehyde [2C]	ND	0.0080	mg/Kg wet							
Endrin Ketone	ND	0.0080	mg/Kg wet							
Endrin Ketone [2C]	ND	0.0080	mg/Kg wet							
<b>leptachlor</b>	ND	0.0050	mg/Kg wet							
feptachlor [2C]	ND	0.0050	mg/Kg wet							
Ieptachlor Epoxide	ND	0.0050	mg/Kg wet							
Ieptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
Iexachlorobenzene	ND	0.0060	mg/Kg wet							
[exachlorobenzene [2C]	ND	0.0060	mg/Kg wet							
<b>Methoxychlor</b>	ND	0.050	mg/Kg wet							
fethoxychlor [2C]	ND	0.050	mg/Kg wet							
oxaphene	ND	0.10	mg/Kg wet							
oxaphene [2C]	ND	0.10	mg/Kg wet							
urrogate: Decachlorobiphenyl	0.156		mg/Kg wet	0.200		77.8	30-150			
urrogate: Decachlorobiphenyl [2C]	0.144		mg/Kg wet	0.200		71.9	30-150			
urrogate: Tetrachloro-m-xylene	0.133		mg/Kg wet	0.200		66.5	30-150			
urrogate: Tetrachioro-m-xylene [2C]	0.127		mg/Kg wet	0.200		63.7	30-150			



#### Organochloride Pesticides by GC/ECD - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B308354 - SW-846 3546										
LCS (B308354-BS1)				repared: 05/	/13/22 Analy:	zed: 05/18/2	2			
Aldrin	0.091	0.0050	mg/Kg wet	0.100		90.8	40-140			
Aldrin [2C]	0.081	0.0050	mg/Kg wet	0.100		81.0	40-140			
alpha-BHC	0.091	0.0050	mg/Kg wet	0.100		90.6	40-140			
alpha-BHC [2C]	0.072	0.0050	mg/Kg wet	0.100		72.3	40-140			
beta-BHC	0.087	0.0050	mg/Kg wet	0.100		86.8	40-140			
beta-BHC [2C]	0.080	0.0050	mg/Kg wet	0.100		79.5	40-140			
delta-BHC	0.089	0.0050	mg/Kg wet	0.100		89.4	40-140			
delta-BHC [2C]	0.081	0.0050	mg/Kg wet	0.100		80.8	40-140			
gamma-BHC (Lindane)	0.091	0.0020	mg/Kg wet	0.100		90.7	40-140			
gamma-BHC (Lindane) [2C]	0.076	0.0020	mg/Kg wet	0.100		76.3	40-140			
4,4'-DDD (2C)	0.096	0.0040	mg/Kg wet	0.100		96.0	40-140			
4,4'-DDD [2C] 4.4'-DDE	0.092	0.0040	mg/Kg wet	0.100		91.7 95.5	40-140 40-140			
4,4'-DDE 4.4'-DDE [2C]	0.095	0.0040	mg/Kg wet	0.100		95.5 90.0	40-140 40-140			
4,4'-DDE [2C] 4,4'-DDT	0.090	0.0040	mg/Kg wet	0.100		90.0 93.5	40-140 40-140			
4,4'-DDT [2C]	0.094	0.0040 0.0040	mg/Kg wet mg/Kg wet	0.100		93.5 86.8	40-140 40-140			
4,4'-DD1' [2C] Dieldrin	0.087 0.092	0.0040	mg/Kg wet mg/Kg wet	0.100 0.100		86.8 91.6	40-140 40-140			
Dieldrin Dieldrin [2C]	0.092 0.088	0.0040	mg/Kg wet mg/Kg wet	0.100 0.100		91.6 87.5	40-140 40-140			
Endosulfan I	0.088 0.088	0.0040	mg/Kg wet mg/Kg wet	0.100		87.5 87.9	40-140 40-140			
Endosulfan I [2C]	0.088	0.0050	mg/Kg wet	0.100		87.9 77.5	40-140			
dosulfan II.	0.078	0.0080	mg/Kg wet	0.100		84.8	40-140			
Endosulfan II [2C]	0.082	0.0080	mg/Kg wet	0.100		82.2	40-140			
Endosulfan Sulfate	0.082	0.0080	mg/Kg wet	0.100		73.1	40-140			
Endosulfan Sulfate [2C]	0.075	0.0080	mg/Kg wet	0.100		75.3	40-140			
Endrin	0.086	0.0080	mg/Kg wet	0.100		86.5	40-140			
Endrin [2C]	0.086	0.0080	mg/Kg wet	0.100		86.0	40-140			
Endrin Ketone	0.088	0.0080	mg/Kg wet	0.100		88.4	40-140			
Endrin Ketone [2C]	0.081	0.0080	mg/Kg wet	0.100		81.2	40-140			
Heptachlor	0.094	0.0050	mg/Kg wet	0.100		94.1	40-140			
Heptachlor [2C]	0.079	0.0050	mg/Kg wet	0.100		78.7	40-140			
Heptachlor Epoxide	0.089	0.0050	mg/Kg wet	0.100		88.8	40-140			
Heptachlor Epoxide [2C]	0.082	0.0050	mg/Kg wet	0.100		81.9	40-140			
Hexachlorobenzene	0.084	0.0060	mg/Kg wet	0.100		84.4	40-140			
Hexachlorobenzene [2C]	0.073	0.0060	mg/Kg wet	0.100		73.3	40-140			
Methoxychlor	0.082	0.050	mg/Kg wet	0.100		82.0	40-140			
Methoxychlor [2C]	0.081	0.050	mg/Kg wet	0.100		81.2	40-140			
Surrogate: Decachlorobiphenyl	0.150		mg/Kg wet	0.200		75.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.123		mg/Kg wet	0.200		61.3	30-150			
Surrogate: Tetrachioro-m-xylene	0.154		mg/Kg wet	0.200		77.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.122		mg/Kg wet	0.200		60.9	30-150			
LCS Dup (B308354-BSD1)					/13/22 Analy:					
Aldrin	0.082	0.0050	mg/Kg wet	0.100		82.2	40-140	9.95	30	
Aldrin [2C]	0.081	0.0050	mg/Kg wet	0.100		81.2	40-140	0.268	30	
alpha-BHC	0.078	0.0050	mg/Kg wet	0.100		78.1	40-140	14.8	30	
alpha-BHC [2C]	0.075	0.0050	mg/Kg wet	0.100		74.6	40-140	3.11	30	
beta-BHC	0.079	0.0050	mg/Kg wet	0.100		78.5	40-140	9.99	30	
beta-BHC [2C]	0.079	0.0050	mg/Kg wet	0.100		78.7	40-140	1.08	30	
іа-ВНС	0.081	0.0050	mg/Kg wet	0.100		81.2	40-140	9.66	30	
_elta-BHC [2C]	0.079	0.0050	mg/Kg wet	0.100		79.2	40-140	1.94	30	
gamma-BHC (Lindane)	0.079	0.0020	mg/Kg wet	0.100		79.4	40-140	13.3	30	
gamma-BHC (Lindane) [2C]	0.078	0.0020	mg/Kg wet	0.100		77.8	40-140	1.83	30	



#### Organochloride Pesticides by GC/ECD - Quality Control

Analsua	7714	Reporting	T I-i+a	Spike	Source	%REC	%REC Limits	RPD	RPD Limit	Mat
Analyte	Result	Limit	Units	Level	Result	70KEC	Limits	KrD	PIMIL	Notes
Batch B308354 - SW-846 3546										
LCS Dup (B308354-BSD1)				Prepared: 05	/13/22 Analy	zed: 05/18/2	.2			
4,4'-DDD	0.092	0.0040	mg/Kg wet	0.100		91.9	40-140	4.35	30	
4,4'-DDD (2C)	0.088	0.0040	mg/Kg wet	0.100		87.7	40-140	4.46	30	
4,4'-DDE	0.091	0.0040	mg/Kg wet	0.100		91.1	40-140	4.65	30	
4,4'-DDE [2C]	0.086	0.0040	mg/Kg wet	0.100		86.2	40-140	4.31	30	
,4'-DDT	0.088	0.0040	mg/Kg wet	0.100		88.3	40-140	5.70	30	
4,4'-DDT [2C]	0.082	0.0040	mg/Kg wet	0.100		81.6	40-140	6.23	30	
Dieldrin	0.086	0.0040	mg/Kg wet	0.100		86.4	40-140	5.80	30	
Dieldrin [2C]	0.083	0.0040	mg/Kg wet	0.100		83.5	40-140	4.71	30	
Endosulfan I	0.082	0.0050	mg/Kg wet	0.100		82.5	40-140	6.40	30	
Endosulfan I [2C]	0.077	0.0050	mg/Kg wet	0.100		77.3	40-140	0.324	30	
Endosulfan II	0.080	0.0080	mg/Kg wet	0.100		80.5	40-140	5.20	30	
Endosulfan II [2C]	0.078	0.0080	mg/Kg wet	0.100		78.1	40-140	5.07	30	
Endosulfan Sulfate	0.067	0.0080	mg/Kg wet	0.100		67.5	40-140	8.03	30	
Endosulfan Sulfate [2C]	0.070	0.0080	mg/Kg wet	0.100		70.0	40-140	7.35	30	
Endrin	0.083	0.0080	mg/Kg wet	0.100		82.5	40-140	4.70	30	
Endrin [2C]	0.082	0.0080	mg/Kg wet	0.100		81.7	40-140	5.12	30	
Endrin Ketone	0.085	0.0080	mg/Kg wet	0.100		84.6	40-140	4.42	30	
Endrin Ketone [2C]	0.077	0.0080	mg/Kg wet	0.100		77.1	40-140	5.25	30	
-leptachlor	0.083	0.0050	mg/Kg wet	0.100		83.4	40-140	12.0	30	
Teptachlor [2C]	0.079	0.0050	mg/Kg wet	0.100		79.3	40-140	0.799	30	
eptachlor Epoxide	0.082	0.0050	mg/Kg wet	0.100		82.1	40-140	7.86	30	
feptachlor Epoxide [2C]	0.079	0.0050	mg/Kg wet	0.100		79.3	40-140	3.23	30	
· Iexachlorobenzene	0.077	0.0060	mg/Kg wet	0.100		76.8	40-140	9.43	30	
fexachlorobenzene [2C]	0.076	0.0060	mg/Kg wet	0.100		76.1	40-140	3.73	30	
Methoxychlor	0.077	0.050	mg/Kg wet	0.100		77.2	40-140	5.93	30	
Methoxychlor [2C]	0.077	0.050	mg/Kg wet	0.100		76.7	40-140	5.68	30	
Surrogate: Decachlorobiphenyl	0.143		mg/Kg wet	0.200		71.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.121		mg/Kg wet	0.200		60.4	30-150			
Surrogate: Tetrachloro-m-xylene	0.136		mg/Kg wet	0.200		68.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.129		mg/Kg wet	0.200		64.4	30-150			



#### Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308353 - SW-846 3546										
Blank (B308353-BLK1)				Prepared: 05	/13/22 Analy	yzed: 05/17/2	22			
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.194		mg/Kg wet	0.200		97.1	30-150			
urogate: Decachlorobiphenyl [2C]	0.193		mg/Kg wet	0.200		96.3	30-150			
rrogate: Tetrachloro-m-xylene	0.159		mg/Kg wet	0.200		79.5	30-150			
urrogate: Tetrachloro-m-xylene [2C]	0.141		mg/Kg wet	0.200		70.5	30-150			
.CS (B308353-BS1)			I	Prepared: 05	/13/22 Analy	zed: 05/17/2	.2			
Aroclor-1016	0.15	0.020	mg/Kg wet	0.200		73.4	40-140			
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		75.4	40-140			
Aroclor-1260	0.16	0.020	mg/Kg wet	0.200		81.8	40-140			
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		80.2	40-140			
urrogate: Decachlorobiphenyl	0.196		mg/Kg wet	0.200		98.0	30-150			
urrogate: Decachlorobiphenyl [2C]	0.195		mg/Kg wet	0.200		97.5	30-150			
urrogate: Tetrachioro-m-xylene	0.166		mg/Kg wet	0.200		82.8	30-150			
urrogate: Tetrachloro-m-xylene [2C]	0.148		mg/Kg wet	0.200		74.1	30-150			
CS Dup (B308353-BSD1)			F	repared: 05/	/13/22 Analy	zed: 05/17/2	2			
roclor-1016	0.15	0.020	mg/Kg wet	0.200		73.9	40-140	0.797	30	
roclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		76.0	40-140	0.847	30	
roclor-1260	0.17	0.020	mg/Kg wet	0.200		83.2	40-140	1.70	30	
roclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		82.1	40-140	2.41	30	
urrogate: Decachlorobiphenyl	0.195	<del></del>	mg/Kg wet	0.200		97.3	30-150			
urrogate: Decachlorobiphenyl [2C]	0.195		mg/Kg wet	0.200		97.5	30-150			
urrogate: Tetrachloro-m-xylene	0.163		mg/Kg wet	0.200		81.4	30-150			
urrogate: Tetrachloro-m-xylene [2C]	0.147		mg/Kg wet	0.200		73.5	30-150			



### Herbicides by GC/ECD - Quality Control

eatch B309280 - SW-846 8151 clank (B309280-BLK1) 4-D 4-D [2C]										
4-D								····	····	
				Prepared: 05	i/25/22 Analy	zed: 05/29/2	2			
4-D [2C]	ND	24	μg/kg wet							
	ND	24	μg/kg wet							
4-DB	ND	24	μg/kg wet							
4-DB [2C]	ND	24	μg/kg wet							
4,5-TP (Silvex)	ND	2.4	μg/kg wet							
4,5-TP (Silvex) [2C]	ND	2.4	μg/kg wet							
4,5-T	ND	2.4	μg/kg wet							
4,5-T [2C]	ND	2.4	μg/kg wet							
alapon	ND	60	μg/kg wet							
alapon [2C]	ND	60	μg/kg wet							
icamba	ND	2.4	μg/kg wet							
icamba [2C]	ND	2.4	μg/kg wet							
ichloroprop	ND	24	μg/kg wet							
ichloroprop [2C]	ND	24	μg/kg wet							
CPA	ND	2400	μg/kg wet							
[CPA [2C]	ND	2400	μg/kg wet							
CPP	ND	2400	μg/kg wet							V-06
CPP [2C]	ND	2400	μg/kg wet							
rrogate: 2,4-Dichlorophenylacetic acid	64.0		μg/kg wet	95.2		67.2	30-150			
urogate: 2,4-Dichlorophenylacetic acid	64.1		μg/kg wet	95.2		67.3	30-150			
CS (B309280-BS1)			1	Prepared: 05	/25/22 Analy	zed: 05/29/2	2			
4-D	95.0	25	μg/kg wet	125		76.0	40-140	-		
4-D [2C]	102	25	μg/kg wet	125		81.2	40-140			
4-DB	73.9	25	μg/kg wet	125		59.1	40-140			
4-DB [2C]	73.7	25	μg/kg wet	125		58.9	40-140			
4,5-TP (Silvex)	9.50	2.5	μg/kg wet	12.5		76.0	40-140			
4,5-TP (Silvex) [2C]	10.3	2.5	μg/kg wet	12.5		82.8	40-140			
4,5-T	9.04	2.5	μg/kg wet	12.5		72.3	40-140			
\$,5-T [2C]	9.49	2.5	μg/kg wet	12.5		75.9	40-140			
alapon	149	62	μg/kg wet	312		47.6	40-140			
dapon [2C]	148	62	μg/kg wet	312		47.5	40-140			
camba	9.12	2.5	μg/kg wet	12.5		72.9	40-140			
camba [2C]	9.86	2.5	µg∕kg wet	12.5		78.9	40-140			
chloroprop	100	25	μg/kg wet	125		80.2	40-140			
chloroprop [2C]	103	25	μg/kg wet	125		82.4	40-140			
CPA	10800	2500	μg/kg wct	12500		86.2	40-140			
CPA [2C]	9010	2500	μg/kg wet	12500		72.1	40-140			
CPP	13000	2500	μg/kg wet	12500		104	40-140			V-06
CPP (2C)	9770	2500	μg/kg wet	12500		78.1	40-140			
rrogate: 2,4-Dichlorophenylacetic acid	70.7		μg/kg wet	100		70.7	30-150			
rrogate: 2,4-Dichlorophenylacetic acid	73.4		μg/kg wet	100		73.4	30-150			



#### QUALITY CONTROL

#### Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B309280 - SW-846 8151										
LCS Dup (B309280-BSD1)				Prepared: 05	/25/22 Anal	yzed: 05/29/2	22			
2,4-D	95.8	25	μg/kg wet	125		76.6	40-140	0.837	30	
2,4-D [2C]	103	25	μg/kg wet	125		82.2	40-140	1.21	30	
2,4-DB	73.5	25	μg/kg wet	125		58.8	40-140	0.615	30	
2,4-DB [2C]	74.7	25	μg/kg wet	125		59.8	40-140	1.41	30	
2,4,5-TP (Silvex)	9.42	2.5	μg/kg wet	12.5		75.4	40-140	0.864	30	
2,4,5-TP (Silvex) [2C]	10.4	2.5	μg/kg wet	12.5		83.4	40-140	0.806	30	
2,4,5-T	8.96	2.5	μg/kg wet	12.5		71.7	40-140	0.842	30	
2,4,5-T [2C]	9.59	2.5	μg/kg wet	12.5		76.8	40-140	1.14	30	
Dalapon	149	62	μg/kg wet	312		47.8	40-140	0.288	30	
Dalapon [2C]	149	62	μg/kg wet	312		47.7	40-140	0.427	30	
Dicamba	9.75	2.5	μg/kg wet	12.5		78.0	40-140	6.66	30	
Dicamba [2C]	9.97	2.5	μg/kg wet	12.5		79.7	40-140	1.09	30	
Dichloroprop	101	25	μg/kg wet	125		80.9	40-140	0.908	30	
Dichloroprop [2C]	104	25	μg/kg wet	125		83.4	40-140	1.20	30	
MCPA	10800	2500	μg/kg wet	12500		86.4	40-140	0.225	30	
MCPA [2C]	9110	2500	μg/kg wet	12500		72.9	40-140	1.11	30	
MCPP	13300	2500	μg/kg wet	12500		106	40-140	1.59	30	V-06
MCPP [2C]	9870	2500	μg/kg wet	12500		78.9	40-140	0.995	30	
Surrogate: 2,4-Dichlorophenylacetic acid	71.3		μg/kg wet	100		71.3	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid	74.1		μg/kg wet	100		74.1	30-150			



#### Petroleum Hydrocarbons Analyses - Quality Control

Aпаlyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308525 - SW-846 3546	Result	- Dillit	Oma	Level	Result	/IICC	2mm3	14.5	- Dillit	Trotes
Blank (B308525-BLK1)				Prepared: 05	5/16/22 Analy	yzed: 05/18/2	22			
ТРН (С9-С36)	ND	8.3	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	2.50		mg/Kg wet	3.33		74.9	40-140			
LCS (B308525-BS1)				Prepared: 05	i/16/22 Analy	yzed: 05/18/	22			
ТРН (С9-С36)	24.2	8.3	mg/Kg wet	33.3		72.7	40-140			
Surrogate: 2-Fluorobiphenyl	2.22		mg/Kg wet	3.33		66.6	40-140			
LCS Dup (B308525-BSD1)				Prepared: 05	5/16/22 Analy	yzed: 05/18/2	22			
ТРН (С9-С36)	26.6	8.3	mg/Kg wet	33.3		79.8	40-140	9.25	30	
Surrogate: 2-Fluorobiphenyl	2.41		mg/Kg wet	3.33		72.2	40-140			



Zinc

## 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 QUALITY CONTROL

#### Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308621 - SW-846 3050B										
Blank (B308621-BLK1)			<u> </u>	Prepared: 05	5/17/22 Analy	zed: 05/24/2	22		********	
Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	3.3	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Chromium	ND	0.66	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Nickel	ND	0.66	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Vanadium	ND	0.66	mg/Kg wet							
Zinc	ND	0.66	mg/Kg wet							
LCS (B308621-BS1)			1	Prepared: 05	/17/22 Analy	yzed: 05/24/2	22			
Antimony	85.7	4.9	mg/Kg wet	99.5		86.1	2.5-209			
Arsenic	141	9.8	mg/Kg wet	140		101	82.9-117.9			
3arium	212	4.9	mg/Kg wet	202		105	81.2-118.3			
Beryllium	45.6	0.49	mg/Kg wet	42.6		107	81-119			
Cadmium	95.5	0.98	mg/Kg wet	97.9		97.6	80-119.5			
romium	59.0	2.0	mg/Kg wet	60.4		97.6	80.3-119.7			
ad	57.7	1.5	mg/Kg wet	56.7		102	82.9-116.9			
Nickel	153	2.0	mg/Kg wet	151		101	79.5-121.2			
Selenium	37.4	9.8	mg/Kg wet	35.5		105	77.5-122.3			
Silver	21.4	0.98	mg/Kg wet	20.4		105	79.4-121.1			
'hallium	71.8	4.9	mg/Kg wet	69.3		104	79.4-120.6			
Vanadium	45.3	2.0	mg/Kg wet	44.9		101	78-121.8			
Zinc	182	2.0	mg/Kg wet	186		98.0	79-121			
CS Dup (B308621-BSD1)				Prepared: 05	i/17/22 Anal	yzed: 05/24/2				
Antimony	91.0	5.0	mg/Kg wet	99.5		91.5	2.5-209	6.02	30	
Arsenic	144	10	mg/Kg wet	140		103	82.9-117.9	1.83	30	
Barium	215	5.0	mg/Kg wet	202		107	81.2-118.3	1.69	20	
Beryllium	46.5	0.50	mg/Kg wet	42.6		109	81-119	2.06	30	
Cadmium	99.4	1.0	mg/Kg wet	97.9		101	80-119.5	3.96	20	
Chromium	61.6	2.0	mg/Kg wet	60.4		102	80.3-119.7	4.39	30	
ead	58.6	1.5	mg/Kg wet	56.7		103	82.9-116.9	1.58	30	
lickel	155	2.0	mg/Kg wet	151		102	79.5-121.2	1.10	30	
elenium	38.9	10	mg/Kg wet	35.5		109	77.5-122.3	3.75	30	
ilver	22.1	1.0	mg/Kg wet	20.4		108	79.4-121.1	3.16	30	
hallium	75.5	5.0	mg/Kg wet	69.3		109	79.4-120.6	5.01	30	
'anadium	47.2	2.0	mg/Kg wet	44.9		105	78-121.8	4.12	30	
•		2.0		100		00 4	70 131	0.204	20	

2.0 mg/Kg wet

183

186

98.4

79-121

0.384

30



#### QUALITY CONTROL

#### Metals Analyses (Total) - Quality Control

		Donostino		Cmiles			%REC		RPD	
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Notes
Batch B308621 - SW-846 3050B		·								
Reference (B308621-SRM1) MRL Check				Prepared: 05	5/17/22 Analy	yzed: 05/24/	22			
Lead	0.640	0.50	mg/Kg wet	0.498		129 +	80-120			M-10
Batch B309067 - SW-846 7471										
Blank (B309067-BLK1)				Prepared &	Analyzed: 05	/23/22				
Mercury	ND	0.025	mg/Kg wet							
LCS (B309067-BS1)				Prepared &	Analyzed: 05	/23/22				
Mercury	14.4	0.73	mg/Kg wet	16.5		87.5	74.5-124.8			
LCS Dup (B309067-BSD1)				Prepared &	Analyzed: 05	/23/22				
Mercury	14.8	0.74	mg/Kg wet	16.5		89.9	74.5-124.8	2.70	20	



#### Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B308341 - SW-846 9045C			······································							
LCS (B308341-BS1)				Prepared &	Analyzed: 05	/12/22				
pH	5.98		pH Units	6.00		99.6	90-110			
LCS (B308341-BS2)				Prepared &	Analyzed: 05	/12/22				
рН	5.98	,	pH Units	6.00		99.7	90-110			
Batch B308429 - SM21-23 2510B Modified										
Blauk (B308429-BLK1)				Prepared: 05	/14/22 Analy	yzed: 05/17/	22			
Specific conductance	ND	2.0	μmhos/cm		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
LCS (B308429-BS1)				Prepared & A	Analyzed: 05	/14/22				
Specific conductance	140		μmhos/cm	137		104	90-122		,	
Duplicate (B308429-DUP1)	Sou	rce: 22E0834	-01	Prepared & A	Analyzed: 05	/14/22				
Specific conductance	11	2.0	μmhos/cm		9.7	1		14.3	41.4	
Batch B308563 - SW-846 9030A										
Blank (B308563-BLK1)				Prepared: 05	/17/22 Analy	yzed: 05/18/	22			
Reactive Sulfide	ND	2.0	mg/Kg							
LCS (B308563-BS1)				Prepared: 05	/17/22 Analy	yzed: 05/18/	22			
active Sulfide	. 12	2.0	mg/Kg	10.0		116	75.7-125			
Batch B308564 - SW-846 9014										
Blank (B308564-BLK1)				Prepared: 05	/17/22 Analy	yzed: 05/18/	22			
Reactive Cyanide	ND	0.40	mg/Kg							
LCS (B308564-BS1)				Prepared: 05	/17/22 Analy	yzed: 05/18/	22			
Reactive Cyanide	9.5	0.40	mg/Kg	10.0		95.4	81.2-113			
Batch B308571 - SW-846 1010A-B										
Blank (B308571-BLK1)				Prepared & A	Analyzed: 05	/17/22				
Flashpoint	> 212 °F		°F							
CS (B308571-BS1)				Prepared & A	Analyzed: 05/	/17/22				
lashpoint	81		°F	81.0		99.9	98.8-101			



#### Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308571 - SW-846 1010A-B	·									
LCS Dup (B308571-BSD1)				Prepared &	Analyzed: 05	/17/22				
Flashpoint	81		°F	81.0		99.9	98.8-101	0.00	5	



#### BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM1	Analyzed:	05/17/2022
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	10.34		
Endrin [1]	9.07		
Column Number:	2		
Commit Humber.	2		
Analyte	% Breakdown		
Analyte 4,4'-DDT [2]	% Breakdown 9.14		

#### BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM2	Analyzed:	05/17/2022
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	9.87		
Endrin [1]	8.21		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	8.94		
Endrin [2]	8.13		

#### BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM3	Analyzed: 05/18/2022
Column Number:	1	
Analyte	% Breakdown	
4,4'-DDT [1]	8.54	
Endrin [1]	9.91	



## 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM3	Analyzed:	05/18/2022
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	7.76		
Endrin [2]	9.87		

#### BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM4	Analyzed:	05/18/2022
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	8.33		
Endrin [1]	9.25		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	7.59		
Endrin [2]	9.54		

#### BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM5	Analyzed: 05/18/2022
Column Number:	1	
Analyte	% Breakdown	
4,4'-DDT [1]	7.27	
Endrin [1]	9.94	
Column Number:	2	
Analyte	% Breakdown	
4,4'-DDT [2]	6.53	
Endrin [2]	9.61	

BREAKDOWN REPORT



## 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 BREAKDOWN REPORT

Lab Sample ID:	S071799-PEM1	Analyzed:	05/22/2022	
Column Number:	1			
Analyte	% Breakdown			
4,4'-DDT [1]	2.02			
Endrin [1]	1.49			
Column Number:	2			
Analyte	% Breakdown			
4,4'-DDT [2]	1.65			
Endrin [2]	2.06			



## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Comp. #1. (2-10ft)

Lab Sample ID:	22E0834-01		Date(s) Analyzed:	05/22/2022	05/22	/2022
Instrument ID (1):	ECD6A	•	Instrument ID (2):	ECD6B	}	
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
711716.1716			FROM	ТО	CONCENTION	70111 5
4,4'-DDD	1	7.181	0.000	0.000	28	
	2	7.190	0.000	0.000	34	15.9
4,4'-DDE	1	6.742	0.000	0.000	3.2	
	2	6.763	0.000	0.000	2.7	16.9
4,4'-DDT	1	7.392	0.000	0.000	1400	
	2	7.427	0.000	0.000	1400	0.0
Dieldrin	1	6.957	0.000	0.000	7.8	
	2	6.867	0.000	0.000	7.1	9.4



## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS	

SW-846 8082A

Lab Sample ID:	B308353-BS1	_	Date(s) Analyzed:	05/17/2022	05/	7/2022
Instrument ID (1):	ECD1		Instrument ID (2):	ECD1		<del></del>
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD	
711712112	002	111	FROM	TO	OONOLIVITATION	70111 2	
Aroclor-1016	1	0.000	0.000	0.000	0.15		
	2	0.000	0.000	0.000	0.15	0.0	
Aroclor-1260	1	0.000	0.000	0.000	0.16		
	2	0.000	0.000	0.000	0.16	0.0	



## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS	Dup	

SW-846 8082A

Lab Sample ID:	B308353-BSD1		Date(s) Analyzed:	05/17/2022	05/17	/2022
Instrument ID (1):	ECD1		Instrument ID (2):	ECD1		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	%RPD
711712	002	1,,,	FROM	TO	CONCENTIVITOR	701112
Aroclor-1016	1	0.000	0.000	0.000	0.15	
	2	0.000	0.000	0.000	0.15	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.16	6.1



## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

Lab Sample ID:	B308354-BS1		Date(s) Analyzed:	05/18/2022 05/18/203		2
Instrument ID (1):	ECD2	•	Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

		<u> </u>	RT WINDOW			
ANALYTE	COL	RT	FROM	то	CONCENTRATION	%RPD
4,4'-DDD	1	7.764	0.000	0.000	0.096	
, , , , , , , , , , , , , , , , , , ,	2	7.543	0.000	0.000	0.092	4.3
4,4'-DDE	1	7.298	0.000	0.000	0.095	
	2	7.100	0.000	0.000	0.090	6.5
4,4'-DDT	1	7.978	0.000	0.000	0.094	
	2	7.784	0.000	0.000	0.087	7.7
Aldrin	1	6.608	0.000	0.000	0.091	
	2	6.331	0.000	0.000	0.081	11.6
alpha-BHC	1	5.828	0.000	0.000	0.091	
	2	5.597	0.000	0.000	0.072	23.3
beta-BHC	1	6.105	0.000	0.000	0.087	
	. 2	5.887	0.000	0.000	0.080	8.4
delta-BHC	1	6.235	0.000	0.000	0.089	
	2	6.086	0.000	0.000	0.081	9.4
Dieldrin	1	7.545	0.000	0.000	0.092	
	2	7.220	0.000	0.000	0.088	4.4
Endosulfan I	1	7.362	0.000	0.000	0.088	
	2	7.014	0.000	0.000	0.078	12.0
Endosulfan II	1	7.903	0.000	0.000	0.085	
	2	7.624	0.000	0.000	0.082	3.6
Endosulfan Sulfate	1	8.494	0.000	0.000	0.073	
	2	8.083	0.000	0.000	0.075	2.7
Endrin	1	7.729	0.000	0.000	0.086	
	2	7.452	0.000	0.000	0.086	1.2
Endrin Ketone	1	8.668	0.000	0.000	0.088	
	2	8.445	0.000	0.000	0.081	8.3
gamma-BHC (Lindane)	1	6.048	0.000	0.000	0.091	
	2	5.824	0.000	0.000	0.076	18.0
Heptachlor	1	6.387	0.000	0.000	0.094	
	2	6.110	0.000	0.000	0.079	17.3
Heptachlor Epoxide	1	7.059	0.000	0.000	0.089	



## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS

Lab Sample ID:         B308354-BS1           Instrument ID (1):         ECD2			Date(s) Analyzed:	05/18/2022	05/18/2022
Instrument ID (1):	ECD2		Instrument ID (2):	ECD2	
GC Column (1):	ID:	(mm)	GC Column (2):	1	D: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD	
711712112	002	111	FROM	TO	CONCENTIVATION	,,,,,,	
	2	6.731	0.000	0.000	0.082	8.2	
Hexachlorobenzene	1	5.710	0.000	0.000	0.084		
	2	5.509	0.000	0.000	0.073	14.0	
Methoxychlor	1	8.309	0.000	0.000	0.082		
	2	8.301	0.000	0.000	0.081	1.2	



## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Sample ID:	B308354-BSD1		Date(s) Analyzed:	05/18/2022	05/18/	2022
Instrument ID (1):	ECD2	_	Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
7 11 17 1 ton			FROM	ТО	CONCENTIVITION	7011111
4,4'-DDD	1	7.765	0.000	0.000	0.092	
	2	7.544	0.000	0.000	0.088	4.4
4,4'-DDE	1	7.299	0.000	0.000	0.091	
	2	7.101	0.000	0.000	0.086	5.7
4,4'-DDT	1	7.980	0.000	0.000	0.088	
	2	7.785	0.000	0.000	0.082	7.1
Aldrin	1	6.609	0.000	0.000	0.082	
	2	6.331	0.000	0.000	0.081	1.2
alpha-BHC	1	5.828	0.000	0.000	0.078	
	2	5.597	0.000	0.000	0.075	3.9
beta-BHC	1	6.106	0.000	0.000	0.079	
	2	5.887	0.000	0.000	0.079	0.0
delta-BHC	1	6.235	0.000	0.000	0.081	
	2	6.086	0.000	0.000	0.079	2.5
Dieldrin	1	7.547	0.000	0.000	0.086	
	2	7.221	0.000	0.000	0.083	3.6
Endosulfan I	1	7.363	0.000	0.000	0.082	
	2	7.015	0.000	0.000	0.077	7.5
Endosulfan II	1	7.904	0.000	0.000	0.080	
	2	7.625	0.000	0.000	0.078	3.8
Endosulfan Sulfate	1	8.495	0.000	0.000	0.067	
	2	8.084	0.000	0.000	0.070	2.9
Endrin	1	7.730	0.000	0.000	0.083	
	2	7.453	0.000	0.000	0.082	1.2
Endrin Ketone	1	8.669	0.000	0.000	0.085	
	2	8.446	0.000	0.000	0.077	9.9
gamma-BHC (Lindane)	1	6.048	0.000	0.000	0.079	
	2	5.825	0.000	0.000	0.078	1.3
Heptachlor	1	6.388	0.000	0.000	0.083	
	2	6.110	0.000	0.000	0.079	4.9
Heptachlor Epoxide	1	7.060	0.000	0.000	0.082	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Sample ID:	B308354-BSD1		Date(s) Analyzed:	05/18/2022	05/1	8/2022
Instrument ID (1):	ECD2		Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	то	CONCENTIATION	701 N D
	2	6.731	0.000	0.000	0.079	3.7
Hexachlorobenzene	1	5.711	0.000	0.000	0.077	
	2	5.509	0.000	0.000	0.076	1.3
Methoxychlor	1	8.310	0.000	0.000	0.077	
	2	8.301	0.000	0.000	0.077	0.0



## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LC	s	

SW-846 8151A

Lab Sample ID:	B309280-BS1		Date(s) Analyzed:	05/29/2022	05/29/2	2022
Instrument ID (1):	ECD 8		Instrument ID (2):	ECD 8		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPC
7,00,02.1.0		111	FROM	ТО	CONCENTIVITION	7011111
2,4,5-T	1	17.286	0.000	0.000	9.04	
	2	17.126	0.000	0.000	9.49	5.3
2,4,5-TP (Silvex)	1	17.057	0.000	0.000	9.50	
	2	16.745	0.000	0.000	10.3	8.1
2,4-D	1	15.583	0.000	0.000	95.0	
	2	15.013	0.000	0.000	102	7.1
2,4-DB	1	17.644	0.000	0.000	73.9	
	2	17.478	0.000	0.000	73.7	0.4
Dalapon	1	5.455	0.000	0.000	149	
	2	4.915	0.000	0.000	148	1.3
Dicamba	1	13.332	0.000	0.000	9.12	
	2	12.688	0.000	0.000	9.86	8.0
Dichloroprop	1	15.049	0.000	0.000	100	
	2	14.303	0.000	0.000	103	3.0
MCPA	1	14.195	0.000	0.000	10800	
	2	13.562	0.000	0.000	9010	19.9
MCPP	1	13.840	0.000	0.000	13000	
	2	13.033	0.000	0.000	9770	28.4



## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS	Dup	

SW-846 8151A

Lab Sample ID:	B309280-BSD1		Date(s) Analyzed:	05/29/2022	05/29/2022	2
Instrument ID (1):	ECD 8	•	Instrument ID (2):	ECD 8		
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
///V/E///E	001	111	FROM	то	CONCENTRATION	70111 15
2,4,5-T	1	17.286	0.000	0.000	8.96	
	2	17.126	0.000	0.000	9.59	6.4
2,4,5-TP (Silvex)	1	17.057	0.000	0.000	9.42	
	2	16.745	0.000	0.000	10.4	10.1
2,4-D	1	15.583	0.000	0.000	95.8	
	2	15.012	0.000	0.000	103	7.0
2,4-DB	1	17.644	0.000	0.000	73.5	
	2	17.479	0.000	0.000	74.7	0.9
Dalapon	1	5.455	0.000	0.000	149	
	2	4.916	0.000	0.000	149	0.7
Dicamba	1	13.332	0.000	0.000	9.75	
	2	12.688	0.000	0.000	9.97	1.7
Dichloroprop	1	15.048	0.000	0.000	101	
	2	14.303	0.000	0.000	104	3.9
MCPA	1	14.195	0.000	0.000	10800	
	2	13.562	0.000	0.000	9110	18.8
MCPP	1	13.841	0.000	0.000	13300	
	2	13.033	0.000	0.000	9870	27.4



#### FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
M-10	The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side.
O-32	A dilution was performed as part of the standard analytical procedure.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-11	Elevated reporting limit due to high concentration of target compounds.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
S-12	Surrogate recovery is outside of control limits on confirmatory column, but within control limits on primary column. Data validation is not affected.
S-17	Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.



#### CERTIFICATIONS

Pertified Analyses included in this Re	port
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for annual management and report		
Analyte	Certifications	
SW-846 1010A-B in Soil		
Flashpoint	NY,NC,ME,VA	
SW-846 6010D in Soil	, , ,	
Audin	CTNVINDING III NO	
Antimony	CT,NH,NY,ME,VA,NC	
Arsenic	CT,NH,NY,ME,VA,NC	
Barium	CT,NH,NY,ME,VA,NC	
Beryllium	CT,NH,NY,ME,VA,NC	
Cadmium	CT,NH,NY,ME,VA,NC	
Chromium	CT,NH,NY,ME,VA,NC	
Lead	CT,NH,NY,AIHA,ME,VA,NC	
Nickel	CT,NH,NY,ME,VA,NC	
Selenium	CT,NH,NY,ME,VA,NC	
Silver	CT,NH,NY,ME,VA,NC	
Thallium	CT,NH,NY,ME,VA,NC	•
Vanadium	CT,NH,NY,ME,VA,NC	
Zinc	CT,NH,NY,ME,VA,NC	
SW-846 7471B in Soil		
Mercury	CT,NH,NY,NC,ME,VA	
SW-846 8081B in Soil		
Aldrin	CT,NC,NH,NY,ME,VA	
Aldrin [2C]	CT,NC,NH,NY,ME,VA	
alpha-BHC	CT,NC,NH,NY,ME,VA	
alpha-BHC [2C]	CT,NC,NH,NY,ME,VA	
beta-BHC	CT,NC,NH,NY,ME,VA	
beta-BHC [2C]	CT,NC,NH,NY,ME,VA	
delta-BHC	CT,NC,NH,NY,ME,VA	
delta-BHC [2C]	CT,NC,NH,NY,ME,VA	
gamma-BHC (Lindane)	CT,NC,NH,NY,ME,VA	
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY,ME,VA	
Chlordane	CT,NC,NH,NY,ME,VA	
Chlordane [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDD	CT,NC,NH,NY,ME,VA	
4,4'-DDD [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDE	CT,NC,NH,NY,ME,VA	
4,4'-DDE [2C]	CT,NC,NH,NY,ME,VA	
4,4'-DDT	CT,NC,NH,NY,ME,VA	
4,4'-DDT [2C]	CT,NC,NH,NY,ME,VA	
Dieldrin	CT,NC,NH,NY,ME,VA	
Dieldrin [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan I	CT,NC,NH,NY,ME,VA	
Endosulfan I [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan II	CT,NC,NH,NY,ME,VA	
Endosulfan II [2C]	CT,NC,NH,NY,ME,VA	
Endosulfan Sulfate	CT,NC,NH,NY,ME,VA	
Endosulfan Sulfate [2C]	CT,NC,NH,NY,ME,VA	
Endrin	CT,NC,NH,NY,ME,VA	
Endrin [2C]	CT,NC,NH,NY,ME,VA	



# CERTIFICATIONS

Pertified Analyses included in this Report

	Certifications
SW-846 8081B in Soil	
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NC,NH,NY,ME,VA
Heptachlor [2C]	CT,NC,NH,NY,ME,VA
Heptachlor Epoxide	CT,NC,NH,NY,ME,VA
Heptachlor Epoxide [2C]	CT,NC,NH,NY,ME,VA
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NC,NH,NY,ME,VA
Methoxychlor [2C]	CT,NC,NH,NY,ME,VA
SW-846 8081B in Water	
Aldrin	CT,NC,NH,NY,ME,VA
Aldrin [2C]	CT,NC,NH,NY,ME,VA
alpha-BHC	CT,NC,NH,NY,ME,VA
alpha-BHC [2C]	CT,NC,NH,NY,ME,VA
beta-BHC	CT,NC,NH,NY,ME,VA
beta-BHC [2C]	CT,NC,NH,NY,ME,VA
delta-BHC	CT,NC,NH,NY,ME,VA
delta-BHC [2C]	CT,NC,NH,NY,ME,VA
gamma-BHC (Lindane)	CT,NC,NH,NY,ME,VA
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY,ME,VA
Chlordane	CT,NC,NH,NY,ME,VA
Chlordane [2C]	CT,NC,NH,NY,ME,VA
4,4'-DDD	CT,NC,NH,NY,ME,VA
4,4'-DDD [2C]	CT;NC,NH,NY;ME,VA
4,4'-DDE	CT,NC,NH,NY,ME,VA
4,4'-DDE [2C]	CT,NC,NH,NY,ME,VA
4,4'-DDT	CT,NC,NH,NY,ME,VA
4,4'-DDT [2C]	CT,NC,NH,NY,ME,VA
Dieldrin	CT,NC,NH,NY,ME,VA
Dieldrin [2C]	CT,NC,NH,NY,ME,VA
Endosulfan I	CT,NC,NH,NY,ME,VA
Endosulfan I [2C]	CT,NC,NH,NY,ME,VA
Endosulfan II	CT,NC,NH,NY,ME,VA
Endosulfan II [2C]	CT,NC,NH,NY,ME,VA
Endosulfan Sulfate	CT,NC,NH,NY,ME,VA
Endosulfan Sulfate [2C]	CT,NC,NH,NY,ME,VA
Endrin	CT,NC,NH,NY,ME,VA
Endrin [2C]	CT,NC,NH,NY,ME,VA
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NC,NH,NY,ME,VA
Heptachlor [2C]	CT,NC,NH,NY,ME,VA
Heptachlor Epoxide	CT,NC,NH,NY,ME,VA
Heptachlor Epoxide [2C]	CT,NC,NH,NY,ME,VA
Hexachlorobenzene	NC



# CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications	
SW-846 8081B in Water		
Hexachlorobenzene [2C]	NC .	
Methoxychlor	CT,NC,NH,NY,ME,VA	
Methoxychlor [2C]	CT,NC,NH,NY,ME,VA	
SW-846 8082A in Soil		
Aroclor-1016	CT NILI NIVNIC ME VA DA	
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA	
	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232 [2C] Aroclor-1242	CT,NH,NY,NC,ME,VA,PA	
	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242 [2C] Aroclor-1248	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA CT.NH,NY,NC,ME,VA,PA	
Aroclor-1262		
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA	
Aroclor-1268	NH,NY,NC,ME,VA,PA	
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA NH,NY,NC,ME,VA,PA	
SW-846 8082A in Water	MITH THOUSEN AUTU	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1262	NH,NY,NC,ME,VA,PA	
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA	
Aroclor-1268	NH,NY,NC,ME,VA,PA	
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA	
W-846 8151A in Soil		
2,4-D	NY,ME,NC,NH,VA,CT	
2,4-D [2C]	NY,ME,NC,NH,VA,CT	
2,4-DB	NY,ME,NC,NH,VA,CT	
2,4-DB [2C]	NY,ME,NC,NH,VA,CT	



# CERTIFICATIONS

# Certified Analyses included in this Report

Analyte	Certifications
SW-846 8151A in Soil	
2,4,5-TP (Silvex)	NY,ME,NC,NH,VA,CT
2,4,5-TP (Silvex) [2C]	NY,ME,NC,NH,VA,CT
2,4,5-T	NY,ME,NC,NH,VA,CT
2,4,5-T [2C]	NY,ME,NC,NH,VA,CT
Dalapon	NY,ME,NC,NH,VA,CT
Dalapon [2C]	NY,ME,NC,NH,VA,CT
Dicamba	NY,ME,NC,NH,VA,CT
Dicamba [2C]	NY,ME,NC,NH,VA,CT
Dichloroprop	NY,ME,NC,NH,VA,CT
Dichloroprop [2C]	NY,ME,NC,NH,VA,CT
MCPA	NY,ME,NC,NH,VA,CT
MCPA [2C]	NY,ME,NC,NH,VA,CT
MCPP	NY,ME,NC,NH,VA,CT
MCPP [2C]	NY,ME,NC,NH,VA,CT
SW-846 8151A in Water	
2,4-D	ME,NC,NH,CT,NY,VA
2,4-D [2C]	ME,NC,NH,CT,NY,VA
2,4-DB	ME,NC,NH,CT,NY,VA
2,4-DB [2C]	ME,NC,NH,CT,NY,VA
2,4,5-TP (Silvex)	ME,NC,NH,CT,NY,VA
2,4,5-TP (Silvex) [2C]	ME,NC,NH,CT,NY,VA
2,4,5-T	ME,NC,NH,CT,NY,VA
2,4,5-T [2C]	ME,NC,NH,CT,NY,VA
Dalapon	ME,NC,NH,CT,NY,VA
Dalapon [2C]	ME,NC,NH,CT,NY,VA
Dicamba	ME,NC,NH,CT,NY,VA
Dicamba [2C]	ME,NC,NH,CT,NY,VA
Dichloroprop	ME,NC,NH,CT,NY,VA
Dichloroprop [2C]	ME,NC,NH,CT,NY,VA
MCPA	NC,CT
MCPA [2C]	NC,CT
MCPP	NC,CT
MCPP [2C]	NC,CT
SW-846 8260D in Soil	
Acetone	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME



# CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications	
W-846 8260D in Soil		
Carbon Tetrachloride	CT,NH,NY,ME	
Chlorobenzene	CT,NH,NY,ME	
Chlorodibromomethane	CT,NH,NY,ME	
Chloroethane	СТ, NH, NY, МЕ	
Chloroform	CT,NH,NY,ME	
Chloromethane	CT,NH,NY,ME	
2-Chlorotoluene	CT,NH,NY,ME	
4-Chlorotoluene	CT,NH,NY,ME	
1,2-Dibromo-3-chloropropane (DBCP)	NY	
1,2-Dibromoethane (EDB)	NY	
Dibromomethane	NH,NY,ME	
,2-Dichlorobenzene	CT,NH,NY,ME	
,3-Dichlorobenzene	CT,NH,NY,ME	
,4-Dichlorobenzene	CT,NH,NY,ME	
Dichlorodifluoromethane (Freon 12)	NY,ME	
1,1-Dichloroethane	CT,NH,NY,ME	
,2-Dichloroethane	CT,NH,NY,ME	
,1-Dichloroethylene	CT,NH,NY,ME	
ris-1,2-Dichloroethylene	CT,NH,NY,ME	
rans-1,2-Dichloroethylene	CT,NH,NY,ME	
,2-Dichloropropane	CT,NH,NY,ME	
,3-Dichloropropane	NH,NY,ME	
,2-Dichloropropane	NH,NY,ME	
,1-Dichloropropene	NH,NY,ME	
is-1,3-Dichloropropene	CT,NH,NY,ME	
rans-1,3-Dichloropropene	CT,NH,NY,ME	
,4-Dioxane	NY	
thylbenzene	CT,NH,NY,ME	
(exachlorobutadiene	NH,NY,ME	
-Hexanone (MBK)	CT,NH,NY,ME	
copropylbenzene (Cumene)	CT,NH,NY,ME	
-Isopropyltoluene (p-Cymene)	NH,NY	
fethyl tert-Butyl Ether (MTBE)	NH,NY	
fethylene Chloride	CT,NH,NY,ME	
-Methyl-2-pentanone (MIBK)	CT,NH,NY	
aphthalene	NH,NY,ME	
-Propylbenzene	NH,NY	
tyrene	CT,NH,NY,ME	
,1,1,2-Tetrachloroethane	CT,NH,NY,ME	
1,2,2-Tetrachloroethane	CT,NH,NY,ME	
etrachloroethylene	CT,NH,NY,ME	
pluene	CT,NH,NY,ME	
2,3-Trichlorobenzene	NY	
2,4-Trichlorobenzene	NH,NY,ME	
1,1-Trichloroethane	CT,NH,NY,ME	
1,2-Trichloroethane	CT,NH,NY,ME	
richloroethylene	CT,NH,NY,ME	



# CERTIFICATIONS

#### Pertified Analyses included in this Report

Trickloro/Bucerenthose (Freen II)	Analyte	Certifications	
1.2.4-Trindes/pienzee	SW-846 8260D in Soil		
1.2.4-Trindes/pienzee	Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME	
J.S-Trimethyllocazene   Viny   Cabride   CTM-NY-ME   Principle   CTM-NY-ME			
J.S-Trimethyllocazene   Viny   Cabride   CTM-NY-ME   Principle   CTM-NY-ME			
Vinyl Caloride         CTNH_NYME           -Xylene         CTNH_NYME           -Xylene         CTNN_NYME           SW-446 8270E in Swil           Accessphithere         CTNYNH           Accessphithere         CTNYNH           Accessphithere         CTNYNH           Accessphithere         CTNYNH           Author-me         CTNYNH           Bence (a)perture         CTNYNH           Bence (a)perture         CTNYNH           Bence (b)process (b)processed         CTNYNH           Bence (b)processphere         CTNYNH           Biolog-belroerebety/methate         CTNYNH           4-Bronephrotylphrayletae         CTNYNH           4-Bronephrotylphrayletae         CTNYNH           4-Diorecraphitulere         CTNYNH           C-Chloreraphetae         CTNYNH           Diorecraphitulere         CTNYNH           C-Chloreraphetae			
in y Xylene         CTNINYME           6-Xylene         CTNINYME           SY-44-66 2276 in Soil         CTNYNH           Accomplibleue         CTNYNH           Accompliblyone         CTNYNH           Acstephenone         NYNH           Aulline         NYNH           Aulline         NYNH           Aulline         NYNH           Aulline         CTNYNH           Benzo(p)Innecenbene         CTNYNH           Bid-C-Biorochoxymethane         CTNYNH           Bid-C-Biorochoxymethane         CTNYNH           Bid-C-Biorochoxymethylphdelate         CTNYNH           Bid-C-Biorochoxymethylphdelate         CTNYNH           C-Biorophenol         CTNYNH           B-C-Unionanifie         CTNYNH           2-Chiorocphenol         CTNYNH           Die-betylphinlate         CTNYNH           Die-betylphinlat			
to-Xylene         CTNRNYME           SW-846 STDE In Soil           Acceaphthene         CTNYNH           Acceaphthylene         CTNYNH           Acceaphthylene         CTNYNH           Acceaphthylene         CTNYNH           Anthracene         CTNYNH           Benzo(planthracene         CTNYNH           Benzo(planthracene         CTNYNH           Benzo(plantene         CTNYNH           Benzo(plantene         CTNYNH           Benzo(plantene         CTNYNH           Benzo(plantene         CTNYNH           Benzo(plantene         CTNYNH           BitQ-chlorostayinethne         CTNYNH           BitQ-chlorostayinethne         CTNYNH           BitQ-chlorostayinethne         CTNYNH           BitQ-chlorostayinethne         CTNYNH           BitQ-chlorostayinethne         CTNYNH           BitQ-chlorostayinethne         CTNYNH           Butylencylphthalate         CTNYNH           2-Chlorostayinylensylether         CTNYNH           2-Chlorostayinylensylether         CTNYNH           2-Chlorostayinylensylether         CTNYNH           2-Chlorostayinylensylether         CTNYNH           2-Chlorostayinylensylether         CTNYNH			
SNP-466 8270E in Suil           Accomplicheme         CLNYNH           Accomplicheme         CLNYNH           Accomplichylene         NYNH           Anlinaceme         NYNH           Authoraceme         CLNYNH           Benzor(janithracene         CLNYNH           Bisig-beliorostebusymetheme         CLNYNH           Bisig-beliorostebusymetheme         CLNYNH           Bisig-beliorostebusymetheme         CLNYNH           Bisig-beliorostepoylpheroylenere         CLNYNH           Buylthenylphinalate         CLNYNH           4-Chloronalitie         CLNYNH           2-Chlorosphalate         CLNYNH           2-Chlorosphalate         CLNYNH           2-Chlorosphalate         CLNYNH           Disear(ja)jathalate         CLNYNH           Disear(ja)jathalate         CLNYNH           Ja-Dichlorobezzee         NYNH           Ja-Dichlorobezzee         NYNH <tr< td=""><td></td><td></td><td></td></tr<>			
Acetaphthylene         CT.NY.NH           Acetaphenone         NY.NH           Anilline         NY.NH           Anilline         NY.NH           Anilline         CT.NY.NH           Benzo(a)piyrone         CT.NY.NH           Benzo(b)fluoranihene         CT.NY.NH           Benzo(b)fluoranihene         CT.NY.NH           Benzo(b)fluoranihene         CT.NY.NH           BitQ-a-Inocrethoy/mathane         CT.NY.NH           BitQ-a-Inocrethy/pathene         CT.NY.NH           BitQ-a-Inocrethy/pathene         CT.NY.NH           BitQ-a-Inocrethy/pathene         CT.NY.NH           BitQ-a-Inocrethy/pathene         CT.NY.NH           BitQ-a-Inocrethy/pathene         CT.NY.NH           4-Bromopheny/pheny/ether         CT.NY.NH           2-Chlorophenol         CT.NY.NH           2-Chlorophenol         CT.NY.NH           2-Chlorophenol         CT.NY.NH           Dibenz(a,h)anthracene         CT.NY.NH           Dibenz(a,h)anthracene         CT.NY.NH           Dibenz(a,h)anthracene         CT.NY.NH           1,3-Dichlorobenzene         NY.NH           1,3-Dichlorobenzene         NY.NH           1,3-Dichlorobenzene         NY.NH           2,4-Dichin	SW-846 8270E in Soil		
Actiline         NY,NH           Anilina         NY,NH           Anilina         NY,NH           Anilina         NY,NH           Benzo(a) jambracene         CT,NY,NH           Benzo(b) fluorenthene         CT,NY,NH           Benzo(b) fluorenthene         CT,NY,NH           Benzo(b) fluorenthene         CT,NY,NH           Benzo(b) fluorenthene         CT,NY,NH           BitiQ-a-binovalty-bene         CT,NY,NH           BitiQ-a-binovalty-bene         CT,NY,NH           BitiQ-a-binovalty-bene         CT,NY,NH           BitiQ-a-binovalty-bene         CT,NY,NH           BitiQ-a-binovalty-bene         CT,NY,NH           Buylbenzylphthalate         CT,NY,NH           4-Chloropaphthalane         CT,NY,NH           2-Chloropaphthalane         CT,NY,NH           Chysene         CT,NY,NH           Chysene         CT,NY,NH           Dibenzo/brano         CT,NY,NH           Di-benzo/brano         CT,NY,NH           Di-benzo/brano         CT,NY,NH           L,2-Di-bindrobrazene         NY,NH           1,3-Di-bindrobrazene         NY,NH           1,4-Di-bindrobrazene         NY,NH           2,4-Dinitorobrazene         CT,NY,NH	Acenaphthene	СТ,NY,NH	
Aniline NY,NH Anthracene CI,NY,NH Benzo(a)miracene CI,NY,NH Benzo(b)jayene CI,NY,NH Benzo(b)fluoranthene CI,NY,NH Benzo(b,il)perylene CI,NY,NH Benzo(b,il)perylene CI,NY,NH Benzo(b,il)perylene CI,NY,NH Bid2-chiorosthypethene CI,NY,NH Bid2-chiorosthypethene CI,NY,NH Bid2-chiorosthyphthatae CI,NY,NH Bid2-binorosthyphthatae CI,NY,NH Bid2-binorosthyphthatae CI,NY,NH Bid2-binorosthyphthatae CI,NY,NH Bid2-binorosthyphthatae CI,NY,NH Bid2-binorosthyphthatae CI,NY,NH Bid2-binorosthyphthatae CI,NY,NH Chrysene CI,NY,NH Chrysene CI,NY,NH Chrysene CI,NY,NH Dibenz(d,b)andracene CI,NY,NH Dibenz(d,b)andracene CI,NY,NH Dibenz(d,b)andracene CI,NY,NH Di-a-buylphthatae CI,NY,NH J,-Dichlorobenzee NY,NH J,-Dichlorobenzee NY,NH J,-Dichlorobenzee NY,NH J,-Dichlorobenzee NY,NH Dibenz(d,b)andracene CI,NY,NH Dibenz(d,b)andracene CI,NY,NH Di-a-buylphthatae CI,NY,NH J,-Dichlorobenzee NY,NH J,-Dichlorobenzee NY,NH Di-a-buylphthate CI,NH Di-a-buylphthate CI,NH Di-a-buylphthate CI,NH Di-a-buylphthate CI,NH Di-a-buylphthate	Acenaphthylene	CT,NY,NH	
Anthracene         CT,NY,NH           Bezzo (a)partracene         CT,NY,NH           Bezzo (a)pyreae         CT,NY,NH           Bezzo (a),Djerylene         CT,NY,NH           Bezzo (a),Djerylene         CT,NY,NH           Bezzo (a),Djerylene         CT,NY,NH           Bist(2-chlorotosy)methane         CT,NY,NH           2-Chlorotosy)methane         CT,NY,NH           2-Chlorotosy)methane         CT,NY,NH           2-Chlorotosy)methane         CT,NY,NH           2-Chlorotosy)methane         CT,NY,NH           Dibenzo(h,D)anthracene         CT,NY,NH           Dibenzo(h,D)anthracene         CT,NY,NH           Di-bracofuran         CT,NY,NH           1,2-Disherotoszaline         CT,NY,NH           1,2	Acetophenone	NY,NH	
Benzo (a) suthracene	Aniline	NY,NH	
Benzo(a)pyrene         CTNY,NH           Benzo(g,h,)perylene         CTNY,NH           Benzo(g,h,)perylene         CTNY,NH           Bis(2-chloroethox)misthane         CTNY,NH           Bis(2-chloroethy)ether         CTNY,NH           Bis(2-chloroethy)ether         CTNY,NH           Bis(2-chloroethy)ghenylether         CTNY,NH           Bis(2-chloroethy)ghenylether         CTNY,NH           Butylbenzylphthalate         CTNY,NH           4-Chlorosaphthalate         CTNY,NH           4-Chlorosaphthalate         CTNY,NH           2-Chlorosaphthalate         CTNY,NH           Chlorophenol         CTNY,NH           Che-butylphthalate         CTNY,NH           1,2-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           2,4-Dichlorobenzene         CTNY,NH           2,4-Dichlorobenzene         CTNY,NH           2,4-Dichlorobenzene         CTNY,NH           2,4-Dichlorobenzene         CTNY,NH           2,4-Dintrophenol         CTNY,NH           2,4-Dintrophenol         CTNY,NH           2,4-Dintrophenol         CTNY,NH           2,4-Dintrophenol         CT,NY,NH	Anthracene	CT,NY,NH	
Benzo(b)fluoranthene         CT,NY,NH           Benzo(g,h,)perylene         CT,NY,NH           Benzo(s,h)fluoranthene         CT,NY,NH           Bit(2-chloroethoxy)methane         CT,NY,NH           Bit(2-chloroethoxy)methane         CT,NY,NH           Bit(2-chloroethoxy)methane         CT,NY,NH           Bit(2-chloroethoxy)methane         CT,NY,NH           Bit(2-chloroethoxy)methane         CT,NY,NH           Bit(2-chloroethoxy)methane         CT,NY,NH           Buylbenzylphthalate         CT,NY,NH           4-Chloroenphthalene         CT,NY,NH           2-Chloropehon         CT,NY,NH           Chloropehonel         CT,NY,NH           Dibenzofuran         CT,NY,NH           1,3-bichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           2,4-Dichlorophenol         CT,NY,NH           2,4-Dichlorophenol         CT,NY,NH           2,4-Dichlorophenol         CT,NY,NH           2,4-Dichlorophenol         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,6-Dinitrotoluene         CT,NY,NH </td <td>Benzo(a)anthracene</td> <td>CT,NY,NH</td> <td></td>	Benzo(a)anthracene	CT,NY,NH	
Bezzo(g,h,i)perylene         CT,NY,NH           Bezzo(k)fluoranthene         CT,NY,NH           Bis(2-chloroethox)ymethane         CT,NY,NH           Bis(2-chloroethoy)plether         CT,NY,NH           Bis(2-chloroethoy)plether         CT,NY,NH           Bis(2-chloroethyr)plethalate         CT,NY,NH           4-Bromophenylphenylether         CT,NY,NH           4-Bromophenylphenylether         CT,NY,NH           Buylbenzylphthalate         CT,NY,NH           2-Chloromaphthalene         CT,NY,NH           2-Chlorophenol         CT,NY,NH           Chrysene         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Di-a-buylphthalate         CT,NY,NH           1,2-Dicklorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dicklorobenzene         NY,NH           2,4-Dinitroblenen         CT,NY,NH           2,4-Dinitrophenol         CT,NY,NH           2,4-Dinitrophenol         CT,NY,NH           2,4-Dinitrophenol         CT,NY,NH           2,4-Dinitrophenol         CT,NY,NH           2,4-Dinitrophenol         CT,NY,NH           2,4-Dinitrophenol         CT,NY,NH	Benzo(a)pyrene	CT,NY,NH	
Betaze(k)fluoranthene         CT,NY,NH           Bis(2-chloroethoxy)methane         CT,NY,NH           Bis(2-chloroethy)lycher         CT,NY,NH           Bis(2-chloroethy)lycher         CT,NY,NH           Bis(2-chlycay)phthalate         CT,NY,NH           4-Bromophenylphenylether         CT,NY,NH           Buylbenzylphthalate         CT,NY,NH           4-Chloroenphthalane         CT,NY,NH           2-Chlorophenol         CT,NY,NH           Chrysene         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Di-a-butylphthalate         CT,NY,NH           1,3-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           3,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         CT,NY,NH           2,4-Dinethylphthalate         CT,NY,NH           2,4-Dinethylphthalate         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           1,1octylphthalate         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           1,1octylphthalate         CT,NY,NH <td>Benzo(b)fluoranthene</td> <td>CT,NY,NH</td> <td></td>	Benzo(b)fluoranthene	CT,NY,NH	
Bis(2-chloroethoxy)methane         CT,NY,NH           Bis(2-chlorosepropy)ether         CT,NY,NH           Bis(2-chlorosepropy)ether         CT,NY,NH           Bis(2-bity)hexyl)phtalate         CT,NY,NH           4-Bromophenylphenylphenylether         CT,NY,NH           4-Chlorocaphthalate         CT,NY,NH           4-Chlorosphenol         CT,NY,NH           2-Chlorosphenol         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Di-a-butylphthalate         CT,NY,NH           1,2-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           3,3-Dichlorobenzene         NY,NH           2,4-Dinitylphthalate         CT,NY,NH           Diethylphthalate         CT,NY,NH           2,4-Dinitylphthalate         CT,NY,NH           2,4-Dinitylphthalate         CT,NY,NH           2,4-Dinitylphenol         CT,NY,NH           2,4-Dinitylphthalate         CT,NY,NH           2,4-Dinitylphthalate         CT,NY,NH           2,4-Dinitylphthalate         CT,NY,NH           2,6-Dinitylotoluene         CT,NY,NH           1,0-n-otylphthalate         <	Benzo(g,h,i)perylene	CT,NY,NH	
Bis(2-chlorosity)pither         CT,NY,NH           Bis(2-chlorosiopropy)pither         CT,NY,NH           Bis(2-chlorosiopropy)pithalate         CT,NY,NH           4-Bromophenylphinalate         CT,NY,NH           Butylbenzylphihalate         CT,NY,NH           4-Chlorosaphthalene         CT,NY,NH           2-Chlorosphenol         CT,NY,NH           Chysene         CT,NY,NH           Dibenzo(n,h)antracene         CT,NY,NH           Dibenzo(tran         CT,NY,NH           1,2-Dichlorobenzene         NY,NH           1,2-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           2,4-Dichlorobenzene         NY,NH           2,4-Dichlorobenzene         CT,NY,NH           2,4-Dichlorobenzene         CT,NY,NH <t< td=""><td>Benzo(k)fluoranthene</td><td>CT,NY,NH</td><td></td></t<>	Benzo(k)fluoranthene	CT,NY,NH	
Bis(2-bloroisopropyl)ether	Bis(2-chloroethoxy)methane	СТ,NY,NH	
Bis(2-Ethylhexylphthalate         CT,NY,NH           4-Bromophenylphenylether         CT,NY,NH           Bulylbenzylphthalate         CT,NY,NH           4-Chloronalhine         CT,NY,NH           2-Chloronaphthalene         CT,NY,NH           2-Chlorophenol         CT,NY,NH           Chysene         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Dibenzofuran         CT,NY,NH           Ji-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           2,4-Dichorobenzidine         CT,NY,NH           2,4-Dichorobenzidine         CT,NY,NH           2,4-Dimethylphthalate         CT,NY,NH           2,4-Dimethylphthalate         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,6-Dinitrotoluene         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH	Bis(2-chloroethyl)ether	СТ,NY,NH	
4-Bromophenylphenylether         CT,NY,NH           Butylbenzylphthalate         CT,NY,NH           4-Chloroaniline         CT,NY,NH           2-Chlorophenol         CT,NY,NH           Chrysene         CT,NY,NH           Dibenz(a,b)anthracene         CT,NY,NH           Dibenzofuran         CT,NY,NH           Di-a-butylphthalate         CT,NY,NH           1,2-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           3,3-Dichlorobenzidine         CT,NY,NH           2,4-Dichlorophenol         CT,NY,NH           Diethylphthalate         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Fluoranthene         CT,NY,NH	Bis(2-chloroisopropyl)ether	CT,NY,NH	
Butylbenzylphthalate         CT,NY,NH           4-Chloroaniline         CT,NY,NH           2-Chlorophenol         CT,NY,NH           2-Chlorophenol         CT,NY,NH           Chrysene         CT,NY,NH           Dibenzofuran         CT,NY,NH           Dibenzofuran         CT,NY,NH           Di-n-butylphthalate         CT,NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           2,4-Dichlorobenzidine         CT,NY,NH           2,4-Dinitrodhenel         CT,NY,NH           2,4-Dinitrodhenel         CT,NY,NH           2,4-Dinitrodhenel         CT,NY,NH           2,4-Dinitrodhenel         CT,NY,NH           2,4-Dinitrodhenel         CT,NY,NH           2,6-Dinitrodhenel         CT,NY,NH           1,0-n-octylphthalate         CT,NY,NH	Bis(2-Ethylhexyl)phthalate	СТ,NY,NH	
4-Chloroaniline         CT,NY,NH           2-Chlorophenol         CT,NY,NH           2-Chlorophenol         CT,NY,NH           Chrysene         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Dibenzofuran         CT,NY,NH           Di-n-buylphthalate         CT,NY,NH           1,2-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           3,3-Dichlorobenzidine         CT,NY,NH           2,4-Dichlorobenzidine         CT,NY,NH           2,4-Dinibrophenol         CT,NY,NH           2,4-Dinibrophenol         CT,NY,NH           2,4-Dinibrophenol         CT,NY,NH           2,4-Dinibrophenol         CT,NY,NH           2,4-Dinibrophenol         CT,NY,NH           2,6-Dinibrotoluene         CT,NY,NH           2,6-Dinibrotoluene         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           1,2-Diphenylhydrazine/Azobenzene         NY,NH	4-Bromophenylphenylether	СТ,NY,NH	
2-Chloronaphthalene         CT,NY,NH           2-Chlorophenol         CT,NY,NH           Chrysene         CT,NY,NH           Dibenz(a,i)anthracene         CT,NY,NH           Dibenzofuran         CT,NY,NH           Di-n-butylphthalate         CT,NY,NH           1,2-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           3,3-Dichlorobenzidine         CT,NY,NH           2,4-Dichlorophenol         CT,NY,NH           2,4-Dinitrothylphthalate         CT,NY,NH           2,4-Dinitrothylphenol         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,6-Dinitrotoluene         CT,NY,NH           1,0-n-octylphthalate         CT,NY,NH           1,2-Diphenylhydrazine/Azobenzene         NY,NH           Fluoranthene         CT,NY,NH	Butylbenzylphthalate	СТ, NY, NH	
2-Chlorophenol         CT,NY,NH           Chrysene         CT,NY,NH           Dibenz(a,h)anthracene         CT,NY,NH           Dibenzofuran         CT,NY,NH           Di-n-butylphthalate         CT,NY,NH           1,2-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           3,3-Dichlorobenzidine         CT,NY,NH           2,4-Dichlorophenol         CT,NY,NH           Diethylphthalate         CT,NY,NH           2,4-Dimethylphthalate         CT,NY,NH           2,4-Dimitrophenol         CT,NY,NH           2,4-Dimitrotoluene         CT,NY,NH           2,6-Dinitrotoluene         CT,NY,NH           2,6-Dinitrotoluene         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           I.2-Diphenylhydrazine/Azobenzene         NY,NH           Fluoranthene         CT,NY,NH	4-Chloroaniline	СТ, NY, NH	
Chrysene         CT,NY,NH           Dibenzofuran         CT,NY,NH           Di-n-butylphthalate         CT,NY,NH           1,2-Dichlorobenzene         NY,NH           1,3-Dichlorobenzene         NY,NH           1,4-Dichlorobenzene         NY,NH           3,3-Dichlorobenzidine         CT,NY,NH           2,4-Dichlorophenol         CT,NY,NH           Diethylphthalate         CT,NY,NH           2,4-Dimethylphthalate         CT,NY,NH           Dimethylphthalate         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,4-Dinitrotoluene         CT,NY,NH           2,6-Dinitrotoluene         CT,NY,NH           Di-n-octylphthalate         CT,NY,NH           Fluoranthene         CT,NY,NH	2-Chloronaphthalene	СТ,NY,NH	
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3,3-Dichlorobenzidine CT,NY,NH  2,4-Dichlorophenol CT,NY,NH Diethylphthalate CT,NY,NH  2,4-Dimethylphthalate CT,NY,NH Dimethylphthalate CT,NY,NH  2,4-Dinitrophenol CT,NY,NH  2,4-Dinitrophenol CT,NY,NH  2,4-Dinitrotoluene CT,NY,NH  2,6-Dinitrotoluene CT,NY,NH  Di-n-octylphthalate CT,NY,NH  Di-n-octylphthalate CT,NY,NH  1,2-Diphenylhydrazine/Azobenzene NY,NH  Fluoranthene CT,NY,NH	1,3-Dichlorobenzene	NY,NH	
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Di-n-octylphthalate CT,NY,NH  1,2-Diphenylhydrazine/Azobenzene NY,NH  Fluoranthene CT,NY,NH	2,4-Dinitrotoluene	CT,NY,NH	
1,2-Diphenylhydrazine/Azobenzene NY,NH Fluoranthene CT,NY,NH	2,6-Dinitrotoluene	CT,NY,NH	
Fluoranthene CT,NY,NH	Di-n-octylphthalate	CT,NY,NH	
	1,2-Diphenylhydrazine/Azobenzene	NY,NH	
Fluorene NY,NH	Fluoranthene	CT,NY,NH	
	Fluorene	NY,NH	



# CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications	
SW-846 8270E in Soil		
Hexachlorobenzene	СТ,NY,NН	
Hexachlorobutadiene	CT,NY,NH	
Hexachloroethane	СТ,NY,NH	
Indeno(1,2,3-cd)pyrene	CT,NY,NH	
Isophorone	СТ, МҮ, МН	
2-Methylnaphthalene	CT,NY,NH	
2-Methylphenol	CT,NY,NH	
3/4-Methylphenol	CT,NY,NH	
Naphthalene	CT,NY,NH	
Nitrobenzene	CT,NY,NH	
2-Nitrophenol	CT,NY,NH	
4-Nitrophenol	CT,NY,NH	
Pentachlorophenol	CT,NY,NH	
Phenanthrene	CT,NY,NH	
Phenol	CT,NY,NH	
Pyrene	CT,NY,NH	
1,2,4-Trichlorobenzene	CT,NY,NH	
2,4,5-Trichlorophenol	CT,NY,NH	
2,4,6-Trichlorophenol	CT,NY,NH	
Con-Test a Pace Environmental Laborator	v. onerster under the following partifications and assertitations.	

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

92E 0834

Page of	<sup>2</sup> Preservation Code	Courler Use Only <u>Total Number Of:</u>	VIALS GLASS PI ASTIC	BACTERIA	Glassware in the fridge?	Glassware in freezer? Y / N	Prepackaged Cooler? Y / N	Pace Analytical is not responsible for missing samples	from prepacked coolers	( <u>Matrix Codes:</u> GW = Ground Wafer	WW w Waste Water DW = Drinking Water	A # Alf	SL = Sludge	O = Other (please	<sup>2</sup> Preservation Codes:	I* Iced H=HCL		N = Nitric Acid	111.01	B = Sodium Bisulfate	100 A	Thiosulfate	O ≈ Other (please define)		In the Chair of Custody. The old it used to determine what o oracoy's responsibility. Pace throughly information, but will one	itents
_07/13/2021 ANALYSIS REQUESTED	<del>, , ,</del>	- S 2 - S 2	145 145	20 / S	503 100 100 100 100 100 100 100 1	メメバメメ												Please use the following codes to indicate possible sample concentration within the Conc	Code column above: H - High; M - Medium; L - Low; C - Clean; U	Unknown		Other	Chromatogram AIHA-LAP,LLC		Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what ahalyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will try to assist with missing information, but will	
Doc # 381 Rev 5.				3	IN COCK	XXX	×											MA MCP Required Please			MA State DW Required		□ □ □		ace Analytical is not respons by is a legal document that booratory will perform. Any les your partnership on each the	
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r. Phone: 413-525-2332 Fax: 413-525-6405 Access COC's and Support Requests	2 Consultant	2657 2657	SSOIL LANGTHON		To a local designation of the second	1 Trees	12676								Date/Time: 78 to C	Chille 120	Matérime: 181	(Date/Time:	(%) (%) (%) (%) (%) (%) (%) (%) (%) (%)		Date/Time:	Date/Time: Pr	Date/Time:			
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I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples\_\_\_\_\_





Recei	ved By	DK		Date	5/12/22		Time	1810	
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		MADE	P MCP Analytical N	Method Report Cer	tification Form		
Lab	oratory Name	e: Con-Test, a F	ace Analytical Labor	ratory	Project #: 22E	0834	
Proj	ect Location:	240 Beaver S	t., Waltham, MA		RTN:		
This	Form provide	es certifications for t	the following data se	t: [list Laboratory Sai	mple ID Number(s)]		
22	E0834-01 thr	u 22E0834-02					
Matr	ices:	Soil					
С	AM Protoco	ol (check all that I	pelow)				
1	VOC IIIA(X)	7470/7471 Hg CAM IIIB (X)	MassDEP VPH (GC/PID/FID) CAM IV A ( )	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlo CAM V	orate 'III B ( )
1	SVOC	7010 Metals CAM III C ()	MassDEP VPH (GC/MS) CAM IV C ( )	8081 Pesticides CAM V B (X)	7196 Hex Cr CAM VI B ( )	MassD CAM IX	EP APH (A()
	Metals III A (X)	6020 Metals CAM III D ( )	MassDEP EPH CAM IV B ( )	8151 Herbicides CAM V C (X)	8330 Explosives CAM VIII A ( )	TO-15 CAM IX	
	A	Affirmative response	to Questions A throu	ghF is required for "F	Presumptive Certainty"	status	
А	Were all samp properly prese method holdin	of-Custody, yzed within	☑ Yes	□No¹			
В	Were the anal protocol(s) follow	lected CAM	☑ Yes	□No¹			
С	Were all requi protocol(s) im	☑ Yes	□No¹				
D	Does the labo Quality Assura Data?		☑ Yes	□No¹			
Еa			las each method conductal method(s) for a list of s	ted without significant significant modifications)		☐ Yes	□No¹
Εb	APH and TO-1	15 Methods only: Was ti	ne complete analyte list r	eported for each method	?	□Yes	□No¹
F				ard non-conformances ide to Qestions A through E		☑ Yes	□No¹
	A response	e to questions G, H a	and I below is require	d for "Presumptive C	ertainty" status		
G	protocol(s)?		•	pecified in the selected C		☐Yes	☑No¹
			-	status may not neces R 40. 1056 (2)(k) and V	ssarily meet the data us VSC-07-350.	sability	
Н	Were all QC po	erfomance standards sp	pecified in the CAM proto	ocol(s) achieved?		□ <sub>Yes</sub>	⊿ <sub>No¹</sub>
ı				the selected CAM protoc	``	☑ Yes	□No¹
<sup>1</sup> All I	Vegative respo	onses must be addres	ssed in an attached En	vironmental Laborator	y case narrative.		
thos	e responsible		formation, the materi		pon my personal inqui nalytical report is, to tl	-	
Sign	ature:	-Tag ;	e e	Position:	Laboratory Director		
Prin	ted Name:	Tod E. Kopyscinsl	(i	Date:	05/30/22		



June 9, 2022

Alan Sundquist CDW Consultants, Inc. 4 California Drive, Suite 301 Framingham, MA 01760

Project Location: 240 Beaver St., Waltham, MA

Client Job Number: Project Number: 1830.1

Laboratory Work Order Number: 22E1819

Keny K. Mille

Enclosed are results of analyses for samples as received by the laboratory on May 26, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerry K. McGee Project Manager

# Table of Contents

Sample Summary	3
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22E1819-01	5
Sample Preparation Information	7
QC Data	8
TCLP - Metals Analyses	8
B309545	8
Flag/Qualifier Summary	9
Certifications	10
Chain of Custody/Sample Receipt	1 1



CDW Consultants, Inc. 4 California Drive, Suite 301 Framingham, MA 01760 ATTN: Alan Sundquist

PURCHASE ORDER NUMBER:

REPORT DATE: 6/9/2022

PROJECT NUMBER:

ANALYTICAL SUMMARY

WORK ORDER NUMBER:

1830.1

22E1819

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION:

240 Beaver St., Waltham, MA

FIELD SAMPLE #

LAB ID:

MATRIX

SAMPLE DESCRIPTION

TEST SM 2540G SUB LAB

Comp #1 (2-10ft)

22E1819-01

Soil

SW-846 6010D



#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington Technical Representative

na Wasslington



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E1819

Date Received: 5/26/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E1819-01
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		73.0		% Wt	1		SM 2540G	5/20/22	5/21/22 15:14	AV



Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E1819

Date Received: 5/26/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E1819-01
Sample Matrix: Soil

TCLP - Metals Analyses

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Lead		0.90	0.10	mg/L	1		SW-846 6010D	5/30/22	5/31/22 19:33	ATP



# Sample Extraction Data

Prep Method: % Solids

Analytical Method: SM 2540G

Lab Number (Field ID)	Batch	Date
22E1819-01 [Comp #1 (2-10ft)]	B308891	05/20/22
Prep Method: SW-846 3010A	Analytical Method: SW-846 6010 Chates were extracted on 5/27/2022 per	SW-846 1311 in Batch B309426

Lab Number [Field ID]	Batch	Initial [mL]	Final (mL)	Date	
22E1819-01 [Comp #1 (2-10ft)]	B309545	50.0	50.0	05/30/22	



#### QUALITY CONTROL

# TCLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B309545 - SW-846 3010A										
Blank (B309545-BLK1)				Prepared: 05	/30/22 Analy	yzed: 05/31/2	.2			
Lead	ND	0.10	mg/L							
LCS (B309545-BS1)				Prepared: 05	/30/22 Analy	yzed: 05/31/2	!2			
Lead	0.492	0.10	mg/L	0.500		98.4	80-120			
LCS Dup (B309545-BSD1)				Prepared: 05	/30/22 Analy	yzed: 05/31/2	.2			
Lead	0.509	0.10	mg/L	0.500		102	80-120	3.29	20	



# 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.



#### CERTIFICATIONS

Certified Analyses included in this Report

Analyte

Certifications

# SW-846 6010D in Water

Lead

#### NY,CT,ME,NC,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Glassware in freezer? Y / N Prepackaged Cooler? Y / N \*Pace Analytical is not responsible for míssing samples Glassware in the fridge? from prepacked coolers 'Matrix Codes: GW = Ground Water WW = Waster Water DW = Drinking Water Total Number Of <sup>2</sup> Preservation Codes: Courier Use Only A = Air. S = Soil SL = Siudge SOL = Soild O = Other (please <sup>2</sup> Preservation Code S = Sulfuric Acid BACTERIA ENCORE N = Nitric Acid PLASTIC GLASS VIALS M \* Methanol - H define) possible sample concentration within the Conc H - High; M - Medium; L - Low; C - Clean; U -Please use the following codes to indicate **E(13** Reativate sample -01 for Code column above: ANALYSIS REQUESTED PVA TCLP Pb per 20x rule 15205 Doc # 381 Rev 5\_07/13/2021 3555 CT RCP Required MCP Certification Form Required MA MCP Required 39 Spruce Street East Longmeadow, MA 01028 ENCORE solved Metals Samples phosphate Samples BACTERIA Field Filtered Field Filtered PCB ONLY Lab to Filter Lab to Filter PLASTIC RACOL NON SOXHLET GLASS SOXHLET CHAIN OF CUSTODY RECORD VIALS 0 0 0 8 First 10: 950 4500 7 8 17 Det 1/6 http://www.pacelabs.com EXCEL A rnaround Time Oue Date: 3-Day 6 CLP Like Data Pkg Required: One Case 60.33 den Rush-Appro Detection Limit Requirement PFAS 10-Day (std) Client Comments: Ş Format: Other: 7-Day -bay 2-Day 5/w/z 11/2/23 Ե FROM LOSK HOW Bearing 57 wanthow Access COC's and Support Requests COU CONSULTANTS (2-10 12 18L 、イング Date/Time: 72 ec. Phone: 413-525-2332 Fax: 413-525-6405 LLOTTON Date/Time: Date/Time: Date/Time: Ħ <u>ر</u> ا BENIA UR -075 -265 IN OCH \$ 200 7.0% Pace Analytical . 44. C Project Location: 240 ,0 C. Relinquished by: (signature) Pace Quote Name/Number ished by: (signature Received by: (signature) Received by: (signature) nvoice Recipient: Project Manager: Project Number: Project Name Sampled By: Page 11 of 13

22E1819

23E 0834

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples\_\_\_\_\_





			_ Date _ <i>5/</i>	12/22	Time	1810	)
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				Ambient		Melted fo	e
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re there Rushes?	_	F	Who	was notified?			
Are there Short Holds			. Who	was notified?	David	CV	
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		MADE	P MCP Analytical	Method Report Cer	tification Form		
Lab	oratory Nam	e: Con-Test, a F	Pace Analytical Labo	ratory	Project #: 22E	1819	
Proj	ect Location	: 240 Beaver S	t., Waltham, MA		RTN:		
	Form provid	es certifications for	the following data se	t: [list Laboratory Sar	mple ID Number(s)]		
Matr		Soil					
	<del></del>	ol (check all that I	-alaw)				
8260	VOC	7470/7471 Hg CAM IIIB ()	MassDEP VPH (GC/PID/FID) CAM IV A ( )	8082 PCB CAM V A ( )	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B (	)
1	SVOC IIB()	7010 Metals CAM III C ()	MassDEP VPH (GC/MS) CAM IV C ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP AP CAM IX A ( )	'H
i	Metals III A (X)	6020 Metals CAM III D ( )	MassDEP EPH CAM IV B ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )	
	F	Affirmative response	to Questions A throu	ighF is required for "F	Presumptive Certainty'	'status	
Α	A Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?						
В	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?						
С							O <sup>1</sup>
D	) The state of the						
Еa			Vas each method conduct all method(s) for a list of	cted without significant significant modifications).		☐ Yes ☐ No	O <sup>1</sup>
Еb	APH and TO-	15 Methods only: Was ti	ne complete analyte list	reported for each method	?	☐ Yes ☐ No	O <sup>1</sup>
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				ed for "Presumptive C		<u> </u>	
G	protocol(s)?			pecified in the selected C		☑ Yes □No	O <sup>1</sup>
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Н	Were all QC p	erfomance standards sp	pecified in the CAM prote	ocol(s) achieved?		☑ <sub>Yes</sub> □ <sub>No</sub>	O <sup>1</sup>
1	Were results r	eported for the complete	e analyte list specified in	the selected CAM protoc	col(s)?	☐ Yes ☐ No	O <sup>1</sup>
<sup>1</sup> All l	Vegative resp	onses must be addres	ssed in an attached Er	nvironmental Laborator	ry case narrative.		
thos	e responsible		formation, the mater		pon my personal inqui nalytical report is, to t		
Sigr	ature:	hisa W	orthungtor _	Position:	Technical Represen	tative	
Prin	ted Name:	Lisa A. Worthingto	on	Date:	06/09/22		

# APPENDIX C COPIES OF PUBLIC NOTIFICATION LETTERS

# APPENDIX C COPIES OF PUBLIC NOTIFICATION LETTERS

#### **SECTION 01 11 00**

#### **SUMMARY OF WORK**

#### **PART 1 - GENERAL**

#### 1.1 PROJECT/WORK IDENTIFICATION

A. General: The name of the project is "240 Beaver Street, Waltham, MA". The project number of 1830.20 as noted on Drawings, Specifications and contract documents produced by CDW Consultants, Inc.

#### 1.2 DESCRIPTION OF WORK

- A. The CONTRACTOR'S work includes certain contaminated soil excavation, management and disposal activities to be performed at a portion of the property at 240 Beaver Street, Waltham, MA in compliance with the Draft Release Abatement Measure (RAM) Plan dated September 22, 2022, and prepared in accordance with the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000. Specific Contractor activities shall include the following:
  - Clearing, grubbing, and preparation of the Site
  - The excavation and off-site disposal of up to 500 cubic yards (750 tons) of soil impacted with metals, pesticides and PCBs
  - Site restoration and backfill
  - All other work and materials as specified, noted, and appurtenant
  - All work to be completed by
- B. The CONTRACTOR shall provide a plan to manage, control and secure the work site during the performance of work. The plan shall describe site security, erosion control, and public safety measures as they relate to the use of equipment, access routes, and the management, storage and loading of excavated soil.
- C. The Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Numbers (RTNs) associated with the Site are 3-36027 and 3-36180. CONTRACTOR is directed to MassDEP's online searchable site at <a href="https://eeaonline.eea.state.ma.us/portal#!/search\_/wastesite">https://eeaonline.eea.state.ma.us/portal#!/search\_/wastesite</a> to obtain additional information about the Sites.

# 1.3 COORDINATION

A. General: The Work of the Contract includes the beginning of construction activity through project closeout and warranty periods. The CONTRACTOR shall coordinate all Work with the City of Waltham and ENGINEER.

SUMMARY OF WORK 01 11 00 - 1

### 1.4 QUALITY ASSURANCE:

A. Quality Assurance Plans: The CONTRACTOR shall agree to participate in and conform to all items contained in the Draft RAM Plan and any modifications to that plan.

#### 1.5 PERMITTING REQUIREMENTS:

- A. Local and State Permits: The CONTRACTOR will be responsible for obtaining any local and State permits as required by the City of Waltham to perform the Work of the Contract. The CONTRACTOR shall comply with all requirements and conditions identified in the permits.
- B. Other Permits: Permits, if required for other work including the development and/or operation of the CONTRACTOR's temporary facilities, shall be the responsibility of the CONTRACTOR.

# 1.6 CONTRACTOR REQUIREMENTS:

- A. All employees of the CONTRACTOR and his Subcontractors shall have, at a minimum, OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training, including all appropriate refresher training, in accordance with 29 CFR 1910.120.
- B. The CONTRACTOR shall develop its own site-specific health and safety plan for its workers and visitors to the work site. The CONTRACTOR shall provide its employees with appropriate personal protective equipment as warranted by site conditions and/or the results of employee personal exposure monitoring. The ENGINEER is not responsible for the health and safety of the CONTRACTOR.

**END OF SECTION 01 11 00** 

SUMMARY OF WORK 01 11 00 - 2

# SOIL REMEDIATION AT 240 BEAVER STREET, WALTHAM, MA

# **TECHNICAL SPECIFICATIONS**

01 11 00	Summary of Work
01 71 13	Mobilization, Staging and Demobilization
02 61 00	Handling, Transportation and Disposal of Excavated Materials
31 00 00	Earthwork

# **CONTRACT DRAWINGS**

C-1.0 Approximate Area of Soil Excavation

# **APPENDICES**

APPENDIX A

Draft Release Abatement Measure Plan and TSCA Performance Based Cleanup Plan, 240 Beaver Street, Waltham, MA, RTN's 3-36027 and 3-36180

### **SECTION 01 71 13**

# MOBILIZATION, STAGING AND DEMOBILIZATION

#### **PART 1 - GENERAL**

#### 1.1 DESCRIPTION

- A. Work Includes: The transportation and storage of all equipment, labor and materials to and from the construction site necessary to complete the Work.
- B. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and these Specifications.

#### **PART 2 - MATERIALS**

NOT USED

#### **PART 3 - EXECUTION**

#### 3.1 STORAGE AREA

It shall be the Contractor's sole responsibility to procure and maintain a suitable storage area for tools, materials and equipment necessary to perform the work.

- 1. The storage area obtained by the Contractor shall not obstruct or interfere with pedestrian or vehicular movement, and shall not occupy any space within a public right-of-way, except with specific permission from the Owner.
- 2. For temporary construction access and staging, the Contractor shall enter via the driveway from Beaver Street as shown on the drawing. The Contractor shall set up a temporary staging area for construction purposes on the property.
- 3. The storage / staging and decontamination areas shall be kept neat at all times.
- 4. The Owner shall not be a party to negotiations related to acquisition of areas for storage or cleanup of the same.

## 3.2 EQUIPMENT

- A. Contractor shall transport all equipment to the site, assemble the equipment, disassemble equipment and remove as needed to proceed with the work. During construction, all equipment and materials shall be maintained as needed during the work.
- B. Contractor shall lay and position temporary facilities such as decontamination and equipment/personal trailers to minimize disruption of the work.

# **PART 4 - MEASUREMENT AND PAYMENT**

# 4.1 GENERAL

- A. Separate Measurement or payment shall not be made for all Work of this section, but all costs in connection therewith shall be included in the Contract Lump-Sum price.
- B. Lump Sum cost shall be inclusive of additional occurrences or delays (weather), if required to complete the project

**END OF SECTION 01 71 13** 

## **SECTION 02 61 00**

# HANDLING, TRANSPORTATION, AND DISPOSAL OF EXCAVATED MATERIALS

# PART 1 GENERAL

# 1.1 DESCRIPTION OF WORK

- A. Work Included: This Section describes the work activities required to access, excavate, manage, transport, and dispose of excavated materials.
- B. CONTRACTOR shall furnish all labor, materials, equipment, and incidentals and perform all operations necessary to properly excavate, segregate, sample, classify, handle/manage, load, transport, and dispose of excavated materials within the Area of Work.
- C. CONTRACTOR'S attention is directed to site plans showing the physical limitations of the Area of Work and is fully responsible for managing the sequence of work accordingly.
- D. CONTRACTOR shall furnish, operate, and maintain excavated material stockpile/staging areas and equipment decontamination stations for the duration of excavation activities and dismantle and dispose of decontamination stations and stockpile/staging areas at project completion.
- E. CONTRACTOR is directed to review the attached "Draft Release Abatement Measure Plan and TSCA Performance Based Cleanup Plan" and shall adhere to the provisions of that plan. The plan will become final when submitted to MassDEP after project award and prior to the start of work.

# 1.2 RESPONSIBILITIES

- A. CONTRACTOR's Responsibilities:
  - A. The CONTRACTOR shall prepare an Excavated Materials Management Plan (EMMP) that describes their means and methods to complete the work to be performed under this Specification.
  - B. The CONTRACTOR shall demonstrate that they will conduct the work using the most feasible and least environmentally impactful means and methods. Any additional permitting or mitigation measures required, or delay of time to complete the work as a result of CONTRACTOR means and/or methods or changes thereto, shall be the responsibility of the CONTRACTOR.
  - C. The CONTRACTOR shall establish sufficient survey controls to accurately remove soils to the horizontal and vertical limits established in the drawings.
  - D. The CONTRACTOR shall perform excavation work to the extents shown on Site Plan C-1.0 and as marked in the field. CONTRACTOR shall perform additional excavation work, in areas where unacceptable contamination remains in soil, as directed by the City of Waltham's (City) Environmental Consultant.

- E. The CONTRACTOR shall assist the City's Environmental Consultant in obtaining representative confirmatory samples of the excavated areas for field screening.
- F. The CONTRACTOR shall manage excavated material by securely containing it prior to transport to the disposal, recycling, and reuse facilities.
- G. The CONTRACTOR shall wait until all disposal facility approvals have been received prior to the loading and transportation of excavated materials for disposal.
- K. The CONTRACTOR shall furnish, operate and maintain equipment decontamination stations for the duration of excavation work.
- L. The CONTRACTOR shall develop and implement site-specific emergency response and health and safety protocols and procedures for workers, visitors and trespassers.
- M. The CONTRACTOR shall take protective measures during work included in this section, to prevent conditions at the site that could result in any adverse effect on nearby wildlife/aquatic ecosystems.
- N. For each shipment of material transported to a disposal facility, the CONTRACTOR shall demonstrate to the City that the least costly means of disposal has been selected. This demonstration shall be made prior to shipment.
- O. The CONTRACTOR shall advise the City at least three business days in advance of the schedule for both excavation and transportation off-site of excavated material. No offsite shipments will occur without the approval of the City.
- P. The CONTRACTOR shall provide an environmental field technician to oversee the loading of excavated material for off-site disposal.
- Q. The CONTRACTOR shall complete the transportation and final disposal of excavated materials within 90 days of initial generation of the materials.
- R. The CONTRACTOR shall develop and implement dust control measures.
- B. City of Waltham Responsibilities:
  - A. The City will review and approve the proposed selection of off-site disposal facilities.
  - B. The City's Environmental Consultant has completed waste disposal sampling and analysis, and shall perform field screening and confirmatory sampling of excavated areas, dust control monitoring, and soil documentation coordination.
  - C. The City will be the Generator and will sign all waste profiles and MCP Bills of Lading (BOL) as the Generator.
  - D. The City's Licensed Site Professional (LSP) will complete one waste profile, and sign and stamp BOLs as the LSP of Record. All soil shall be transported under a BOL. The receiving facility shall provide electronic attestation of receipt of soils within five days of

receiving notification from the LSP of the availability of the BOL for that purpose on eDEP. Additional waste profiles beyond the first, will be prepared by the CONTRACTOR.

# 1.3 QUALITY ASSURANCE AND QUALITY CONTROL

- A. The CONTRACTOR shall be responsible for the selection of a final disposal facility for soil. Sampling was conducted in May 2022 by the City's LSP to precharacterize the soil.
- B. The provided precharacterization data is intended to include sufficient characterization of the soils for disposal without a need for additional testing. In the absence of the need for additional testing due to quantity changes or unexpected soils encountered during excavation, the CONTRACTOR shall be responsible for any additional sampling and analyses of soil samples required by his selected waste disposal facility beyond those provided in the provided data
- C. The Contractor shall be responsible for any additional sampling and analysis of soil samples required by his selected waste disposal facility, and/or preparation of additional disposal profiles resulting from a change to the selected disposal facility.

#### 1.4 SUBMITTALS

- A. The following shall be submitted within five (5) days after the issuance of the Notice to Proceed. No on-site work can begin until all submittals identified in 1.4(A and B) have been received and approved.
- B. A schedule detailing the proposed sequence of work.
- C. A detailed site plan indicating the construction staging/stockpile areas as they relate to the active construction area. The detailed site plan shall show the potential layout of the staging area as it relates to the stockpile soil, debris and/or miscellaneous materials and construction materials.
- D. A material management system plan to track the excavated materials from generation through final disposition. Plan shall include at a minimum the following:
  - a. Provisions for the tracking of the excavated materials from the "point of excavation location" to the location of the stockpile material in the storage/staging area to the final disposition of the stockpiled material including all proposed daily log sheets.
  - b. Drawings of the proposed area of excavation and any temporary materials management areas, including locations where trees will be removed.
  - c. An Equipment/Vehicle Decontamination Plan.
- E. All pertinent information relating to the transport of excavated material. The information, at a minimum, shall include:
  - a. Name and address of all transporters.
  - b. Transporter identification number (U.S. Environmental Protection Agency (EPA) or Massachusetts Department of Transportation Transporter) and expiration date.
  - c. Proof of permit, license, or authorization to transport excavated material in all affected states.

- d. Details of methods, vehicle and containers (as applicable) to be used for transporting excavated material.
- e. Dust control measures.
- f. Plan for on-site pre-treatment of excavated soil that is unsuitable for transport.
- F. The CONTRACTOR shall identify each waste stream and propose an appropriate disposal facility that will accept the excavated material as classified. The facility shall provide written confirmation that it is permitted to accept and will accept the classified material of the general quality and quantity described in the Draft RAM Plan.
- G. The Contractor shall provide all final disposal documentation, including but limited to:
  - Load sheets completed and signed by the hauler and the receiving facility.
  - Certified weight slips from the receiving facility.
  - The facility and DCR's attestations of shipment and receipt.

#### 1.5 REFERENCES

A. All regulations cited and those of other governing agencies in their most recent version are applicable. This Section refers to many requirements found in these references, but in no way is intended to cite or reiterate all provisions therein or elsewhere. It is the CONTRACTOR's responsibility to know, understand, and abide by all such regulations and common practices. Other provisions contained in these references may from time to time during the execution of this Contract be enforced by the Engineer. In the event of a conflict, the most stringent regulations shall govern.

The following documents and/or publications are made part of this Section by reference herein:

- A. Massachusetts Contingency Plan (MCP), 310 CMR 40.0000.
- B. Massachusetts Hazardous Waste Regulations, 310 CMR 30.00.
- C. Massachusetts Solid Waste Management Facility Regulations, 310 CMR 19.00.
- D. Massachusetts Site Assignment Regulations for Solid Waste Facilities, 310 CMR 16.000.
- E. Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00.
- F. "Interim Remediation Waste Management Policy for Petroleum Contaminated Soils", MassDEP, Bureau of Waste Site Cleanup Policy #WSC-94-400.
- G. "Hazardous Waste Operations and Emergency Response", Federal Occupational Safety and Health Act (OSHA), 29 CFR 1910.120.
- H. "General Regulations for Hazardous Waste Management," EPA, 40 CFR 260.
- I. "Regulations for Identifying Hazardous Waste, Hazardous Waste Generators and Hazardous Waste Transporters", EPA, 40 CFR 261, 262 and 263.
- J. "Standards for Management of Specific Hazardous Wastes and Facilities", EPA, 40 CFR 266.
- K. "Reuse and Disposal of Contaminated Soil at Massachusetts Landfills", MassDEP Policy # COMM-97-001.

- L. "Compendium of Quality Control Requirements and Performance Standards for Selected Analytical Protocols" (CAM), MassDEP, Bureau of Waste Site Cleanup Policy # WSC-10-320.
- M. "Technical Update: Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil," MassDEP.
- N. "Similar Soils Provision Guidance (MassDEP, Bureau of Waste Site Cleanup Policy # WSC#-13-500).
- O. "Interim Remediation Waste Management Policy for Petroleum Contaminated Soils, Attachment II, Jar Headspace Analytical Screening Procedure," MassDEP, Bureau of Waste Site Cleanup Policy #WSC-94-900.
- P. Local regulations governing dust control, soil handling, and health and safety.
- Q. All other applicable Federal, State, or local requirements.

# 1.6 **DEFINITIONS**

- A. Area of Work: the approximate area which includes excavation areas, and those ancillary areas where personnel, equipment and materials are transported, managed, filled or removed. Excavated material not destined for off-site disposal can be returned to approximately the same location from which it originated.
- B. Contaminated Soil: Material found to contain oil or hazardous material (OHM) at concentrations equal to or exceeding applicable MCP Method 1 Standards (310 CMR 40.0300), Reportable Concentrations (310 CMR 40.1600), or regulated background levels (as defined in the MassDEP "Technical Update: Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil" and 310 CMR 40.00006) or other applicable State or Federal Regulations.
- C. Generator: The City will be the Generator, with the exception of materials contaminated by releases from the CONTRACTOR's vehicles, equipment, or supplies.
- D. Hazardous Material/Waste: A waste material or combination of waste material, that because of its quantity, concentration, physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in a serious irreversible or incapacitating reversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed. This definition also includes, but is not limited to, materials regulated under TSCA, M.G.L., Chapter 21E, RCRA (40 CFR 239-282), Massachusetts Hazardous Waste regulations (310CMR 30.00), the MCP (310 CMR 40.00), and any applicable Federal regulations.
- E. Special Waste: Any solid waste that is determined not to be hazardous waste and that exists in such quantities or in such chemical or physical state or any combination thereof so that particular management controls are required to prevent an adverse impact from the collection, transport, transfer, storage, processing, treatment or disposal of the solid waste. Asbestos and PCB-contaminated soils/sediments/fill are examples of special waste.

F. Soil: Any unconsolidated mineral and organic matter, including any fill, overlying bedrock that has been subjected to and influenced by geologic and other environmental factors, excluding sediment.

# 1.7 PERMIT REQUIREMENTS

- A. The CONTRACTOR shall obtain and adhere to all Federal, State, and local permits required for the transport and disposal of excavated material.
- B. The CONTRACTOR shall verify that the disposal facilities proposed have all certifications and permits as required by Federal, State, and local regulatory agencies to receive and dispose of the excavated material.
- C. If applicable, the CONTRACTOR shall adhere to any special conditions of work established by the local Conservation Commission, MA DEP and US Army Corps of Engineers including close-out documentation.

#### **PART 2 - PRODUCTS**

# 2.1 GENERAL

- A. All CONTRACTOR personnel shall wear personal protective equipment and protective clothing consistent with the levels of protection required for this Work.
- B. Any material shipment containers must be approved by and labeled in accordance with the U.S. Department of Transportation (DOT). The containers shall have a secure cover which will prevent a release of material during transportation.
- C. Temporary stockpiles of soil shall be constructed using 10 mil polyethylene double layered as a base. Stockpiles shall be kept covered with a single layer of polyethylene and surrounded with haybales.

#### **PART 3 - EXECUTION**

# 3.1 GENERAL

- A. The CONTRACTOR shall handle and convey all equipment and materials to perform site work described in these Contract documents.
- B. The CONTRACTOR shall excavate soils to the depth and extent shown on the contract drawings. ,
- C. The CONTRACTOR shall load, transport, and dispose of the excavated soil as specified herein.
- D. The CONTRACTOR shall immediately notify the City of visible stains or unnatural odor of any sampled or excavated material, or if potentially contaminated and/or hazardous material is encountered. Work shall not be allowed to continue in this area until approved by the City.

### 3.2 TEMPORARY STORAGE OF EXCAVATED MATERIALS

- A. The stockpiling or consolidating of excavated material near sensitive human health receptors, such as public and private water supply wells, shall be strictly prohibited per 314 CMR 9.07(4)(d).
- B. Excavated material to be temporarily stockpiled shall be placed entirely on a 10-mil polyethylene liner, shall be covered at the end of each day's work and at all times when earthwork is not taking place on site, with the same material or so as to minimize the infiltration of precipitation, volatilization of contaminants and erosion of the stockpile. Covers used shall be properly secured and replaced if damaged. Temporary fencing shall be placed entirely around stockpiles to prevent employees and trespassers from access.
- F. Excavated material shall be completely covered with a minimum 10 mil-thick layer of plastic tarp at the end of each working day and secured with ropes, ties, anchors or equivalent materials. The covered system shall be capable of resisting actual wind gust at the site, with a minimum wind capacity of 40 miles per hour.
- G. Stockpiles are to be segregated based on a review of pre-characterization data, visual and olfactory conditions, sediment sampling and field screening results obtained during excavation.
- H. Stockpiles shall include haybale berms around the edges to minimize infiltration of storm water or exfiltration of leachate.
- I. Any failure of materials or procedures used in employing the base layer or cover layer shall be immediately repaired, replaced or re-secured so as to minimize precipitation infiltration, volatilization and erosion/runoff of the excavated material.
- J. Movement and/or aeration of excavated material shall be limited to those activities that are necessary to manage such stockpiles.
- K. Disposal of material that is contaminated as a result of careless handling, cross-contamination or use of unauthorized procedures shall be at the CONTRACTOR'S expense. Delays of Work resulting from temporary storage of excavated material, regardless of the classification, shall be at no additional cost to the the City.
- L. The stockpiles shall be clearly labeled and securely barricaded from contact with workers and the general public.

# 3.3 DEBRIS MANAGEMENT

A. The CONTRACTOR is required to recycle/reuse any other recovered materials in lieu of disposal if the material is of acceptable physical quality and chemical quality, and the CONTRACTOR can identify a facility willing and permitted to accept the material at no additional cost.

# 3.4 MCP NOTIFICATION REQUIREMENTS FOR SOIL

- A. Notification to the MassDEP under the MCP shall be the sole responsibility of the City.
- B. The CONTRACTOR shall be familiar with the MCP definitions of "two-hour", "72-hour" and "120-day" reportable conditions.

- C. The CONTRACTOR shall immediately notify the DCR of any "two-hour", "72-hour" and "120-day" reporting conditions.
- D. Depending upon the nature of the reportable conditions, the MCP may require the cessation of work, implementing a Limited Removal Action (prior to notification), developing and/or implementing an "Immediate Response Action Plan" or a "Release Abatement Measure Plan" prior to continuing work or other actions, which could delay certain aspects of the site work.
- E. The City's LSP shall prepare electronic eDEP MCP filings required during construction, including but not limited to Release Notification Forms (RNF), Release Abatement Measures (RAM), Utility-related Abatement Measures (URAM), and subsequent associated status and closure reports.
- F. The CONTRACTOR shall provide all soil management and disposal documentation in support of those eDEP filings.

### 3.8 ENVIRONMENTAL FIELD MONITORING/DUST CONTROL

- A. The air quality program is to be designed to protect public health and the environment from the potential generation of dust and OHM contaminant release during the Work.
- B. When there is a potential for visible dust being generated during periods of site activity, air monitoring may be limited to visual assessment and documentation.
- C. Dust shall be controlled during excavation and movement of soil to limit potential spread of contaminants and potential exposure of contaminants to workers and the public.
- D. Nuisance dust levels shall be reduced by pre-wetting the surface soils and by establishing and maintaining clean access roads. At a minimum, the CONTRACTOR shall provide clean water that is free from salt, oil and other deleterious materials.
- E. When feasible, access roads shall be sprayed with water on a regular basis to minimize the generation of dust.
- F. All containers and stockpiles shall be covered at all times, except as necessary to place or remove materials from the containers or stockpiles. The CONTRACTOR shall monitor the covers daily to ensure the covers are in place and effectively eliminating the generation of dust.

### 3.9 DISPOSAL FACILITY CLASSIFICATION

- A. The CONTRACTOR shall transport the material for off-site disposal at a permitted TSCA facility that has accepted the material prior to shipment.
- B. Material shipped to any disposal facility must meet the selected facility's chemical and physical acceptance criteria. Selected facilities must be established, fully operational, appropriately insured, and be operating in compliance with all applicable local, state, and federal regulations.

### 3.10 WASTE PROFILES AND SHIPPING DOCUMENTS

A. The CONTRACTOR shall provide certified tare and gross weight slips for each load received at the accepted facility and these shall be attached to each returned shipping document.

- B. The CONTRACTOR shall prepare and submit to the City for review all waste profile applications and questionnaires, and coordinate with disposal facilities and all Federal and State Environmental Agencies.
- C. The City's Environmental Consultant shall prepare all draft Bills of Lading for review by the CONTRACTOR'S selected facility prior to shipment. Final copies of Bills of Lading shall be signed by the City as generator and by the City's LSP following approvals of draft Bills of Lading.

### 3.11 TRANSPORT OF EXCAVATED MATERIAL

- A. The CONTRACTOR shall not be permitted to transport materials off-site until all disposal facility documentation has been received, reviewed, and approved by the City.
- B. The CONTRACTOR shall transport materials from the site to the disposal facility in accordance with all United States Department of Transportation (USDOT), USEPA, MassDEP, and applicable state and local regulations.
- C. The Hauler(s) shall be licensed in all states affected by transport.
- D. The CONTRACTOR shall be responsible for ensuring that free liquid in soil is not transported. "Wet soils" with free-draining liquids shall not be loaded for transport. When there is a question as to whether this standard is met, the paint filter test (EPA Method 9095) shall be used to determine the presence of free-draining liquids in a representative sample. The CONTRACTOR shall collect and dispose of or manage any free liquids that may result during transportation at no additional cost to the City.
- E. All excavated material transported upon public roadways shall be covered by a tarpaulin or other means to prevent the material from escaping the vehicle during transport, and where necessary, truck tire and undercarriage decontamination shall be employed to prevent the tracking of soils onto public roadways.

### **PART 4 - MEASUREMENT AND PAYMENT**

### 4.1 GENERAL

- A. Measurement and payment for the work of this section is based upon the definitions and classification of the excavated material as described in Sections 1.6 (B) and 3.9. The most cost-effective means of managing, transporting, re-use or disposal shall be used.
  - B. City approval is required prior to transportation and disposal of any materials pre-classified under 1.6 (B).

### 4.2 MEASUREMENT

A. Excavated materials that are classified for transportation and disposal under 1.6 (B), will be measured on a Per Ton basis. The costs covered under the Unit Price shall include all

applicable taxes and surcharges.

B. No separate measurement will be made for all other work in this section, but all costs in connection therewith shall be included in the Contract lump sum price except as otherwise noted. All preparation and incidental work necessary to accomplish the work herein will be considered incidental to the Lump Sum price.

### 4.3 PAYMENT

A. Separate payment shall not be made for all other Work of this section, but all costs in connection therewith shall be included in the Contract Lump-Sum price. All preparation and incidental work necessary to accomplish the work herein will be considered incidental to the Lump Sum price.

### 4.4 PAYMENT ITEMS

ITEM NO.	<u>DESCRIPTION</u>	UNIT
5	TRANSPORT AND DISPOSE OF	
	CONTAMINATED SOIL	TN

END OF SECTION 02 61 00

### **SECTION 31 00 00**

### **EARTHWORK**

### **PART 1 - GENERAL**

### 1.1 DESCRIPTION OF WORK

- A. Extent of earthwork as indicated on the Contract Drawings and as specified herein.
- B. Furnish labor, materials, equipment, transportation and services required to complete all earthwork requirements as specified herein or indicated on the Contract Drawings. The work includes, but is not limited to the following:
  - 1. Clearing, grubbing, and preparation of the Site.
  - 2. Providing, placing, and compacting all fill materials required to complete the project.
  - 3. Removal and on-site relocation or off-site disposal of all boulders, as defined herein, as they interfere with the work.
  - 4. Excavation and temporary stockpiling of soils impacted with metals, PCBs, and pesticides to depths of 9 feet, or to levels approved by the City's ENGINEER.
  - 5. Temporary protection of adjacent public and private property.
  - Legal off-site disposal of unsuitable or surplus excavated materials including soil impacted with metals, pesticides and PCBs.
  - 7. All sheeting, shoring and bracing necessary to protect truck and equipment access areas from collapse.
  - 8. Rough Grading.
  - 9. Restoration.
  - 10. Dust Control.
  - Segregating, culling and all screening operations, stockpiling and handling of onsite material required to render the material suitable for reuse on-site as indicated herein.
  - 12. Preparation and submittal of a Health and Safety Plan prior to initiating earthwork related activities.

### 1.2 STANDARDS AND DEFINITIONS

A. The following standards and definitions are applicable to the work of this Section to the extent referenced herein:

- MDPW Specifications: The Commonwealth of Massachusetts, Department of Public Works, Standard Specifications for Highways and Bridges, including latest revisions.
- 2. ASTM: American Society for Testing and Materials.
- 3. AASHTO: American Association of State Highway and Transportation Officials.
- 4. MCP: Massachusetts Contingency Plan, 310 CMR 40.0000
- 5. Trench Excavation: Excavations of any length where the width is less than twice the depth and where the shortest distance between payment lines does not exceed ten (10') feet.
- 6. Open Excavation: All excavations not conforming to the definition of Trench Excavation shall be defined as Open Excavation.
- 7. Invert or Invert Elevation: The elevation at the inside bottom surface of the pipe or channel.
- 8. Un-Regulated Soil: Excavated material consisting of natural subsoil, or natural glacial outwash which is completely segregated from existing fill material, and is not impacted by contaminants which may be disposed of off-site without restriction
- Regulated Soil: Excavated material which is impacted by contaminants and, if transported off-site, must be disposed of at a landfill or similar facility as specified in Section 026100, Handling, Transportation, and Disposal of Excavated Materials.
- 10. The words "finished grade" as used herein shall mean the required final grade elevations indicated on the Contract Drawings. Spot elevations shall govern over proposed contours. Where not otherwise indicated, project site areas outside of the building shall be given uniform slopes between points for which finished grades are indicated or between such points and existing established grades
- 11. The word "subgrade" as used herein, means the required surface of natural glacial outwash deposit, or compacted Structural Fill. This surface is immediately beneath the site improvements, specially dimensioned fill, paving, loaming or other surfacing material.

### 1.3 EXAMINATION OF SITE CONDITIONS AND DOCUMENTS

- A. It is hereby understood that the CONTRACTOR has carefully examined the site and all conditions affecting work under this Section. No claim for additional costs will be allowed because of lack of full knowledge of existing conditions as indicated in the Contract Documents, or obvious from observation at the Site
- B. Plans, surveys, measurements, and dimensions under which the work is to be performed are believed to be correct, but the CONTRACTOR shall have examined them for himself during the bidding period, as no allowance will be made for any errors or inaccuracies that may be found except as otherwise provided herein.

EARTHWORK

### 1.4 SUBSURFACE CONDITIONS

A. It is the CONTRACTOR's sole responsibility to make interpretations and draw conclusions with respect to the character of the materials to be encountered and their impact upon his work based on his expert knowledge.

### 1.5 PERMITS, CODES AND SAFETY REQUIREMENTS

- A. Work shall conform to the Contract Drawings and Specifications and shall comply with applicable codes and regulations. Present in writing to the ENGINEER, all conflicts between the Contract Drawings, Specifications, and applicable codes and regulations, for resolution before commencing the Work.
- B. Comply with all rules, regulations, laws and ordinances of the City of Waltham and the Commonwealth of Massachusetts, and of all other authorities having jurisdiction. All labor, materials, equipment and services necessary to make the work comply with such requirements, shall be provided without additional cost to the CITY.
- C. The CONTRACTOR shall not close any street, sidewalk or passageway except as indicated on the Contract Drawings. The CONTRACTOR shall so conduct his operations as to interfere as little as possible with the use ordinarily made of roads, driveways, sidewalks or other facilities near enough to the work to be affected thereby.
- D. The CONTRACTOR shall procure and pay for all permits and licenses required for the complete work specified herein and shown on the Contract Drawings at no additional cost to the CITY. Arrange and pay for legal off-site disposal of all excess excavated materials, obtain proper disposal receipts from the applicable disposal facility for verification.
- E. Notify "Dig Safe" and the City before starting work; comply fully with utility company requirements.

### 1.6 LAYOUT AND GRADES

A. The CONTRACTOR shall maintain and/or re-establish benchmarks and survey monuments shown on the Contract Drawings or found to exist on the site to provide a base reference for the construction. Replace any that may become destroyed or disturbed. The CONTRACTOR shall employ and pay all costs for a registered Civil Engineer or Surveyor who is licensed within the jurisdiction of the project site to lay out all lines and grades in accordance with the Contract Drawings and Specifications, and as necessary or required for the construction.

### 1.7 DISPOSITION OF EXISTING UTILITIES

A. Active utilities existing on the site shall be carefully protected from damage and relocated or removed by others as specified in the Contract Documents. When an active utility line is exposed during construction, its location and elevation shall be plotted on the record Contract Drawings and both the ENGINEER and UTILITY OWNER notified in writing.

B. Inactive or abandoned utilities encountered during construction operations shall be noted on the record Contract Drawings and reported in writing to the ENGINEER.

### 1.8 DISPOSAL

- A. The CONTRACTOR shall manage all on-site excavated soils as specified in Section 026100, Handling, Transportation, and Disposal of Excavated Materials.
- B. Solid waste resulting from screening or culling operations shall become the property of the CONTRACTOR and be legally disposed of off-site at no additional cost to the OWNER.

### 1.9 SUBMITTALS

- A. Submit, as specified in Division 01, GENERAL REQUIREMENTS, the following, and as specified in this Section
  - A detailed construction sequence plan for project excavation indicating temporary stockpile areas, side slopes of excavations, limits of any required temporary excavation support and sequence and procedures for slope protection, subgrade protection, excavation, filling, backfill and compaction.
  - No backfill materials shall be brought to the site without prior approval of the City. Submit the following information to the City for review at least two (2) weeks prior to use:
    - Location of the borrow site, including a street map with the limits of the borrow pit property and the location of the borrow source on the site clearly illustrated.
    - b. Present and past usage of the source site and material.
    - c. Any previously existing report(s) associated with an assessment of the source site as relates to the presence of oil or other hazardous materials.
  - 4. Results of the sampling and monitoring program as specified herein for the manufactured top soils.
  - 5. Soil samples.
    - a. Classification in accordance with ASTM D2487 for each on-site or borrow soil material proposed for fill, backfill, or engineered fill.
    - b. Laboratory compaction curve in accordance with ASTM D698 for each on site or borrow soil material proposed for fill, backfill, or engineered fill.

### PART 2 PRODUCTS

### 2.1 MATERIALS

A. Ordinary Fill: Well-graded, natural inorganic soil approved by the ENGINEER and meeting the following requirements:

- 1. It shall be substantially free of organic or other weak or compressible materials, of frozen materials, and of particles larger than 4 inches maximum dimension.
- 2. It shall be of such nature and character that it can be compacted to the specified density in a reasonable length of time.
- It shall be free of highly plastic clays, of all materials subject to decay, decomposition or dissolution, and of cinders or other materials that will corrode piping or other metal.
- B. Topsoil: Provide topsoil in accordance with Section 32 90 00.

### 2.2 UNSUITABLE MATERIAL

- A. Material containing organic matter, frozen materials, debris, materials subject to decomposition, silts too wet to be stabilized, existing fill, and solid waste debris that in the opinion of the ENGINEER, do not satisfy the design requirements, shall be unsuitable material.
- Unsuitable material shall be disposed of off-site by the contractor at no additional cost to the. City.

### 2.3 EQUIPMENT

- A. Provide sufficient equipment units of suitable types to spread, level, and compact fills promptly upon delivery of materials.
- B. CONTRACTOR may use any compaction equipment or device that he finds convenient or economical, but the ENGINEER retains the right to disapprove equipment, which, in his opinion, is of inadequate capacity or unsuited to the character of material being compacted.

### 2.4 SOURCE QUALITY CONTROL

- A. Provide samples of each fill material from the proposed source of supply including onsite sources. Allow at least two (2) weeks for testing and evaluation of results before material is needed.
- 3. All fill material that is imported onto the site shall be substantially free of contamination. The concentrations of contaminants in imported fill material shall not exceed either one-half of the Massachusetts Contingency Plan's (MCP's), 310 CMR 40.0000, RCS-1 reporting thresholds, or the pre-existing contaminant conditions at the site, whichever is lower. The ENGINEER reserves the right to require that the CONTRACTOR perform chemical analysis on the sample being submitted to confirm that the sample is free of contaminants as discussed above. It is not likely that chemical analysis will be required for samples representing fill material originating from a commercial bank-run or rock quarry source. However, it is likely that the ENGINEER will require that chemical analysis be performed on samples originating sources other than commercial bank-run or rock quarry sources. The required chemical analysis will include, but may not be limited to, Extractable Petroleum Hydrocarbons (EPH), Volatile Petroleum Hydrocarbons (VPH), Volatile Organic Compounds (VOC's) by 8260, Polynuclear

Aromatic Hydrocarbons (PAH's) by 8270, Total RCRA-8 Metals, Pesticides/PCB's, and pH. The cost of chemical testing when required by the ENGINEER shall be borne by the CONTRACTOR.

- C. Samples of proposed fill material exhibiting concentrations of contaminants in excess of the standards above will be rejected for use on the site by the ENGINEER.
- D. For samples of proposed fill material originating from a recycling facility, the CONTRACTOR will also be required to submit documentation demonstrating that the facility is permitted by the Massachusetts Department of Environmental Protection, or the Department provided with the required notification, to perform recycling of Asphalt, Brick, and Concrete (ABC) materials, non-coated or impregnated with any substances, in accordance with the Massachusetts solid waste regulations 310 CMR 16.05 (3) (e).
- E. ENGINEER will be sole and final judge of suitability of all materials.
- F. Tests of materials, including chemical testing, as delivered may be made from time to time. Materials in question may not be used, pending test results. Remove rejected materials and replace with new, whether in stockpiles or in place.

### **PART 3 EXECUTION**

### 3.1 GENERAL EXCAVATION

- A. Excavate all materials as indicated on the Contract Drawings and specified herein.
- B. All excavation shall be performed in the dry. Excavation shall be accomplished by methods that preserve the undisturbed state of subgrade soils.
- C. When excavations have reached the prescribed depths, the ENGINEER shall be notified and will make an inspection of the conditions. After inspection, the CONTRACTOR will receive approval to proceed if conditions meet design requirements.
- D. Should an excavation be carried beyond the depth indicated on the Contract Drawings or as specified herein as a result of CONTRACTOR's error, the CONTRACTOR shall provide and place Ordinary Fill as directed by the ENGINEER, to the required level at no additional cost.

### 3.2 USES OF FILL MATERIALS

- A. Fill materials listed above shall be utilized as follows and as otherwise indicated on the Contract Drawings, specified or directed.
- B. Ordinary Fill: For areas backfilled below a depth of 6 inches.

### 3.3 PLACING FILLS

A. Provide all specified fill materials.

- B. Areas to be filled shall be undisturbed stable soil and shall be free of trash, construction debris, compressible or decayable materials and standing water. Do not place fill when subgrade or layers below it are unsuitable.
- C. Notify the ENGINEER when excavations are ready for inspection. Filling shall not be started until conditions have been approved by the ENGINEER.
- D. Furnish approved materials. Place fill in layers not exceeding 6 inches in compacted thickness and compact as specified below for various fill conditions.
- E. Place Ordinary Fill in uniform lifts not exceeding 6 inches (compacted thickness) and compact to 92 percent of its maximum dry Proctor density.
- F. Within lawns and planting areas:
  - 1. All fills to within eighteen inches (18") of finished grade shall be compacted to 90 percent of its maximum modified dry Proctor density.
  - 2. All fills within eighteen inches (18") of finished grade shall be compacted to between 88 percent and 90 percent of its maximum modified dry Proctor density.
- G. In the case of lawn and planting areas, compaction requirements for subgrades and fills shall be considered minimums and maximums within the density percentages called for, and any over compaction of subgrades or fills which would be detrimental to lawn or planting objectives shall be corrected by loosening subgrades or fills through tilling or other means and recompacting to specified compaction limits.
- H. The CONTRACTOR shall notify the ENGINEER three (3) days in advance when the rough grades are established and ready for formal inspection.

### 3.4 ROUGH GRADING

- A. Rough grading shall include the shaping, trimming, rolling, and refinishing of all surfaces of the subbase, shoulders, and earth slopes, and the preparation of grades as shown on the Contract Drawings. The grading of shoulders and sloped areas may be done by machine methods. All ruts shall be eliminated. Traffic of workers and equipment across the soil subgrade areas shall be prohibited following excavation to the required lines and grades.
- B. If, during the progress of work, any pipe, drain, or other construction is damaged due to operations under the Contract, the CONTRACTOR shall repair all damage at no additional cost to the City and restore damaged areas to their original conditions.
- C. Perform all other cutting, filling and grading to the lines and limits indicated on the Contract Drawings. Grade evenly to within the dimensions required for grades shown on Contract Drawings and specified herein. No stones larger than four inches (4") in largest diameter shall be placed in upper six inches (6") of fill. Fill shall be left in a compacted state at the end of the workday and sloped to drain.
- D. The CONTRACTOR shall bring all areas to grades as shown on the Contract Drawings and in the details. The City however, may make such adjustments in grades and alignments as are found necessary to avoid special conditions encountered.
- E. No rubbish of any description shall be allowed to enter fill material. Such material shall be removed from the site.

F. Placed fill materials that become disturbed shall be regraded and re-compacted. Fill materials that become contaminated shall be removed and replaced, as directed by the City.

### 3.5 SUBGRADE MAINTENANCE

- A. The work of this Section shall provide a subgrade which shall be parallel to the finished grades or elevations shown on the Contract Drawings and shall be below finished grades in accordance with the various depths specified herein below.
- B. Upon completion of rough grading operations, remove all debris and rubbish and leave areas ready for work by other trades
- C. Settlement of fills and washouts shall be corrected by filling and compacting as specified herein.

### 3.6 DUST CONTROL

- A. The CONTRACTOR shall manage dust as specified in Section 026100, Handling, Transportation, and Disposal of Excavated Materials.
- B. The CONTRACTOR shall take all necessary measures and provide equipment and/or materials to minimize dust from rising and blowing across the site and from impacting neighboring residential property to the satisfaction of the OWNER. In addition, the CONTRACTOR shall control all dust created by construction operations and movement of construction vehicles, both on the site and paved ways.
- C. If dust control is required off-site due to work under this Contract, in addition to watering, sweeping and other methods, the CONTRACTOR shall apply water in the required amounts to properly control dust.
- D. The use of calcium chloride, petroleum products, or other chemicals is prohibited. Chemical materials may not be used on subgrades of areas to be seeded or planted.

### **PART 4 - MEASUREMENT AND PAYMENT**

### 4.1 GENERAL

A. Separate Measurement or payment shall not be made for all Work of this section, but all costs in connection therewith shall be included in the Contract Lump-Sum price.

### END OF SECTION 31 00 00

# FIRE DEPARTMENT INFORMATION REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET

## DiGregorio, Donna

From:

DiGregorio, Donna

Sent:

Friday, September 23, 2022 10:24 AM

To:

Fitzgerald, Jennifer

Subject:

RE: 240 Beaver Street

Yes, Jennifer Sandra already sent us the information from Building. The Mayor wanted to check to see if the Fire Department had anything on the property.

Thanks I'll give this to her.

Donna

From: Fitzgerald, Jennifer < jfitzgerald@fire-dept.waltham.ma.us>

Sent: Friday, September 23, 2022 9:25 AM

**To:** DiGregorio, Donna <ddigregorio@city.waltham.ma.us> **Cc:** Grant, Richard <rgrant@fire-dept.waltham.ma.us>

Subject: RE: 240 Beaver Street

Hi Donna,

I suspect you need the Building Department – it depends on what type of permits you are looking for.

I don't know what a "work card" is.

We have not received any plans for 240 Beaver Street.

That would be the step before they get a building permit (if Fire Department review is required).

- -They had a tent on the property 6/04/22-6/05/22.
- -I have an expired (5/12/2022) Propane permit for forklift(s).
- -We have a copy of DEP form for Asbestos removal in 2010.
- -We have record of 4 Aboveground tank removals in 2009.
- -We also have records of underground tank removals = 2 in 2001, 2 in 1998, 2 in 1992, 1 in 1991, 1 in 1983.
- -Between 2001 to present (current record set) the Fire Department responded to 6 medical calls, 10 accidents (on the street), 3 grass/outdoor fires, 2 wires down/tree fires and one gas burner/smoke problem.

I do not have any other Fire Department permits for 240 Beaver Street.

(Fire Alarm, Sprinkler, Tank Trucks, Above or Underground tank installs, Blasting, Compressed Gas or Cryogenic Fluids, Flammable Storage, Hazardous Materials processing, Hot work, Oil Burners, or Unvented heaters) If you want a copy of anything we *do* have, please let me know.

**Thanks** 

Jennifer Fitzgerald

Fire Prevention Bureau 175 Lexington Street Waltham, MA 02452

# LAW DEPARTMENT INFORMATION REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET

### SECOND EXTENSION OF LICENSE AGREEMENT

This Second Extension of License Agreement ("Second Extension") is made on December 15, 2020 by and between the University of Massachusetts Amherst ("University") and Community Farms Outreach d/b/a Waltham Fields Community Farm ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018 and a First Extension dated April 30, 2020, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. TERM: The term of the Agreement shall be extended on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of One Thousand Six Hundred Sixty-two Dollars and Fifty cents (\$1,662.50) per month.
- 3. PREMISES: The text in Section 2 (Premises) is hereby deleted and replaced with the following text:
  - "Use of offices 07, 08, 108A, 110, 112, 117, and 119, closets 08A and 118, hallway 112A, restroom 117A, and store room 02, all located within the main building at 240 Beaver Street, Waltham, MA, and land consisting of 8.25 acres farm land and land occupied by CSA Barn, Pesticide Storage Building, Greenhouses 6 and 7, Agricultural Storage Shed, Volunteer Shed, and Learning Garden, as shown in Exhibit A pages one through three."
- Section 22 (Miscellaneous Provisions) Exhibit A Licensed Land dated April 27, 2020 is hereby deleted and replaced with Exhibit A – Licensed Land dated January 13, 2021, Basement Floor Plan dated August 10, 2011, and First Floor Plan dated August 10, 2011.
- 5. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Second Extension as of the date first written above.

### **UNIVERSITY:**

UNIVERSITY OF MASSACHSETTS

-DocuSigned by:

By: \_\_\_\_\_lndrw f. Mangels
Name: Andrew P. Mangels

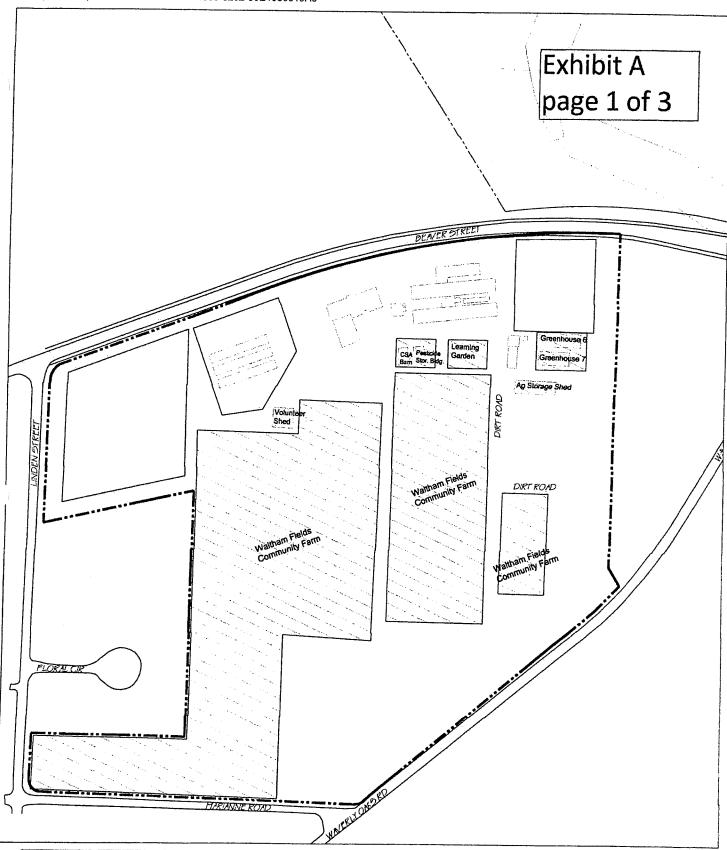
Title: Vice Chancellor for Administration and Finance

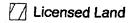
LICENSEE:

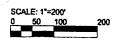
COMMUNITY FARMS OUTREACH

Name: Stacey Daley

Title: Executive Director







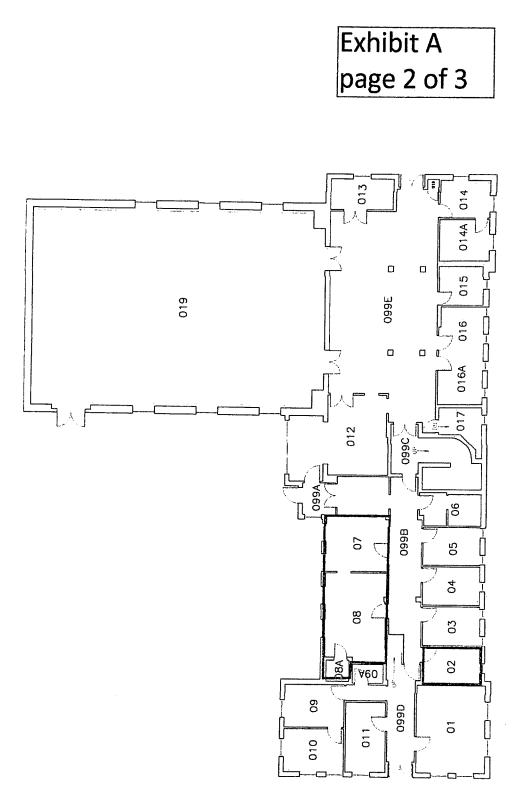
WALTHAM STATION

COMMUNITY FARMS OUTREACH EXHIBIT A - LICENSED LAND

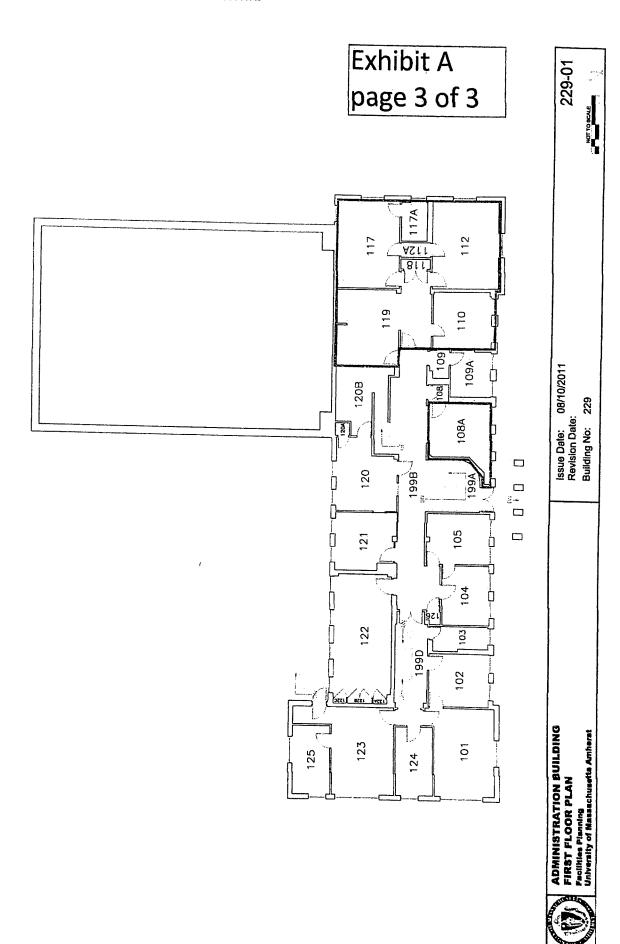


1/13/2021

UMass Campus Planning







### FIRST EXTENSION OF LICENSE AGREEMENT

This First Extension of License Agreement ("First Extension") is made on <u>April 30, 2020</u> by and between the University of Massachusetts Amherst ("University") and Community Farms Outreach d/b/a Waltham Fields Community Farm ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. Section 1 (Reference Data) of the Agreement shall be modified as follows:
  - a. Delete the Mailing Address of the University currently listed and replace same with: "Steven Goodwin, Whitmore Administration Building Room 347, 181 Presidents Drive, Amherst, MA 01003".
  - b. Delete the Premises and Permitted Use text following the Mailing Address.
- 2. Delete the text of Section 2 (Location of the Premises) and replace same with:

### "2. PREMISES

Use of offices 7, 8, 106, and 119, and store room 2, all located within the main building at 240 Beaver Street, Waltham, MA, and land consisting of 8.25 acres farm land and land occupied by CSA Barn, Pesticide Storage Building, Greenhouses 6 and 7, Agricultural Storage Shed, Volunteer Shed, and Learning Garden, as shown in Exhibit A."

- 3. TERM: The term of the Agreement shall be extended through December 31, 2020.
- 4. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of Twenty Thousand Five Hundred Fifty and 00/100 Dollars (\$20,550.00), payable in advance in monthly installments of One Thousand Seven Hundred Twelve Dollars and Fifty-one cents (\$1,712.50) per month.
- 5. Section 12 (Surrender of Premises) is hereby amended by deleting the following language in its entirety: "However, if the expiration or termination takes place after the onset of the

Licensee's farming season (January 1<sup>st</sup>) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises."

- 6. Section 12 (Hazardous Materials) is hereby amended to replace "Robert Schrader" with "the University's Environmental Health & Safety Office".
- 7. Section 15 (Insurance) is hereby amended to add the following to the end of the section: "All certificates of insurance from Licensee shall list the University as an additional insured."
- 8. Section 22 (Miscellaneous Provisions) is hereby amended by placing an "X" next to Exhibit A to indicate inclusion of same. Exhibit A showing land licensed is hereby attached and incorporated herein by reference.
- 9. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

### UNIVERSITY:

UNIVERSITY OF MASSACHSETTS

DocuSigned by:

By: Undrew Mangels

Name: Andrew P. Mangels

Title: Vice Chancellor for Administration and Finance

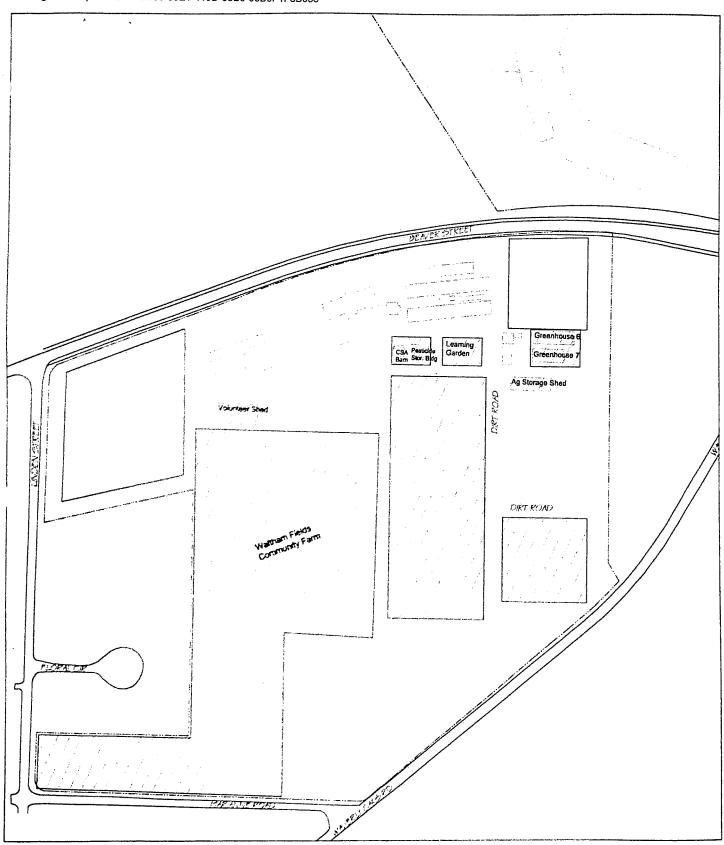
LICENSEE:

COMMUNITY FARMS OUTREACH

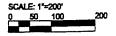
ву: \_\_

Name: Stacey Daley

Title: Executive Director







WALTHAM STATION
COMMUNITY FARMS OUTREACH
EXHIBIT A - LICENSED LAND



4/27/2020 UMass Campus Planning

# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of land at the UMass Waltham Center. This agreement is between Community Farms Outreach d/b/a Waltham Fields Community Farm (hereinafter Licensee), a non profit corporation and the University of Massachusetts (hereinafter referred to as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver Street in Waltham and further described in Section 2 of this Agreement; and

WHEREAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

### 1. REFERENCE DATA:

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee:

Stacey Daley, Interim Executive Director Waltham Fields Community Farm 240 Beaver Street Waltham, MA 02453

Premises: Use of 8.25 acres of farm land, five offices, storage room, plus the land for two greenhouses (see #7 below).

Permitted Use: The farm land will be used to grow, harvest and distribute food as identified in the mission of this organization. CFO will provide the heat for the greenhouses.

# 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at See # 7 below.

# 3. PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: The farm land will be used to harvest, sell, and distribute food consistent with the mission of this organization. The direct sale of farm products will be limited to the normal seasonal hours of distribution of CSA farm shares to members. A portion of the produce will be provided to people in need of food assistance. The land is also used to for education for school and camp groups, as well as for the general public.

Specific rules governing access to and use of these facilities are attached as **Exhibit B** and are binding upon both parties.

# 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use.

### 5. TERM

Term of Agreement: July 1, 2018 to December 31, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

# 6. HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

## 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

Two offices: rooms 7 & 8	\$7,500
Two offices: rooms 9 & 10	\$5,250
One office: room 1	\$5,250
Store room # 2	\$900
Land and utilities for two greenhouses	\$4,500
Eight and one quarter (8.25) acres of land	\$7,425
Total	<u>\$30,825</u>

### 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

### 9. ALTERATION OF THE PREMISES

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as Exhibit C. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

### 10. LICENSEE'S EQUIPMENT

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

### 11. <u>UTILITIES</u>

The University shall provide janitorial services for common areas of the buildings and

general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

# 12. <u>CONDUCT OF LICENSEE</u>

# Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by duly designated personnel of the University.

# Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

### Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

### Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in **Exhibit B.** 

### Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

# Cost of Operations

Except as otherwise expressly set forth in this Agreement, Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

# Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

### Hazardous Materials

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert Schrader.

### Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement, Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

### Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1<sup>st</sup>) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

### 13. INDEMNIFICATION

Not Applicable

### 14. RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage

caused by any act of Licensee's invitees or members of the general public.

#### 15. INSURANCE

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

- Comprehensive public liability insurance in an amount as required by Massachusetts law. A.
- Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an B. amount as required by Massachusetts law.
- Workers Compensation Insurance covering Licensee's employees upon the Premises in C. such amounts as are required by law.
- Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as Exhibit D.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

### 16. **ASSIGNMENT**

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

### 17. RIGHTS OF UNIVERSITY AND AGENCY TO ENTER

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

### 18. **TERMINATION**

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause</u>. Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. For Cause. If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.
- C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18, Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

### 19. NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

### 20. <u>NON-DISCRIMINATION</u>

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in employment.

### 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

# 22. <u>MISCELLANEOUS PROVISIONS</u>

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

**Staff Services:** University staff are responsible for operation and maintenance of the facility. University staff do not provide plant production or administrative services. Each organization must provide their own labor and related services.

Rubbish and Organic Materials Removal: Licensee is responsible for removing rubbish and recyclable materials to dumpsters and/or receptacles for recycling. Plant waste and related organic materials are to be discarded in areas identified by the facility manager.

**Site Maintenance & Appearance:** Assigned area must appear neat, clean, and orderly throughout the year. Refuse cannot be left at the site. End of the season clean-up is required. Details for clean-up and closing of land operations will be provided.

Water and Utilities: Water is generally provided to each site. Water conservation must be practiced. Water leaks are to be reported to the Facility Manager. All groups using more than an acre of land and the community garden group (GROW) will provide their own water meter in order to monitor use. The University will limit water use as deemed necessary.

Alterations and Changes in Use of the Land: The land can only be used for the purpose stated in the application form and Agreement. Any changes in use or changes to the land or landscape must be requested in writing to the Facility Manager. This includes pruning any surrounding trees or shrubs and adding structures, fencing, trellises or related items.

Signage: Small descriptive signs are to be posted at the site, identifying the organization, use of the land (purpose) and contact person for further information.

Contacts and Communications: All issues related to building and facility use should be brought to the attention of the Facility Manager, Tony Mazzeo.

Joe Shoenfeld Associate Director, UMass Center for Agriculture, Food and the Environment July, 2018

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver is in writing and is signed by the party to be charged.

This Agreement is to take effect as a sealed instrument.

The following exhibits and attachments are made a part of this Agreement for all purposes:

Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee

Exhibit B - Specific Rules Governing Access and Use of Facility

Exhibit C - Schedule of Permitted Alterations and Improvements

Exhibit D - Insurance Certificate(s)

AGREED AND ACCEPTED

**UNIVERSITY OF MASSACHUSETTS:**  LICENSEE:

Joe Shoenfeld, Associate Director Center for Agriculture, Food and the

Environment

University of Massachusetts

Stacey Daley, Interim Executive Director

Community Farms Outreach

9

# CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

	ER				CONTAC NAME:	T			
Aon Risk Services Northeast, Inc. Providence RI Office				NAME: PHONE (A/C, No. Ext): (866) 283-7122 FAX (A/C, No. Ext): (800) 363-0105					
Providence RI Office 100 Westminster Street, 10th Floor Providence RI 02903-2393 USA					E-MAIL ADDRESS:				
	Jence KI 02903-2393 03A						URER(S) AFFO	RDING COVERAGE	NAIC#
NSURED									
University of Massachusetts				INSURER 8:				RRG 10020	
333 South Street, Suite 450 hrewsbury MA 01545 USA					INSURER C:				
					INSURER D:				
					INSURE	ł E:			
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Community Farms Outreach			POLICY PROVISIONS. THORIZED REPRESENTATIVE						
	Attn: Shannon Taylor								
	Attn: Shannon Taylor 240 Beaver Streeet			AUTHO	DRIZED RE	PRESENTATIVE			

Amended version 9/25/18 of Attachment to License Agreement with Waltham Fields Community Farm, per Joe Shoenfeld. (\) \( \) \(

Exhibit B Use of Grounds and Land at UMass Waltham, 240 Beaver Street, Waltham, Mass.

# Specific Rules Governing Access To and Use of Facility

The following rules apply to use of the facility. All communications related to compliance with use rules and requests for permitted variances should be directed to Facility Manager (Tony Mazzeo) at the facility.

### **General Rules:**

**Civility and Adherence to Rules:** Licensees are responsible for actions of their staff, guests and general public invited onto premises. Licensee is responsible for ensuring compliance with all facility rules.

**Hours of Operation:** Facility is open to licensees and their guests. The building is accessible from 6 AM-11 PM. Outside grounds are accessible from 6 AM till dark.

**Parking:** Parking is generally available in lots surrounding the building. No parking is allowed on the grass without prior approval. No vehicles are to be left overnight without prior approval.

**Persons Authorized to Have Access to Facility:** Each licensee is to provide to the Facility Manager a list of persons who will have regular access to the facility. All persons having regular access to the building must be over the age of 6. For persons utilizing space within the buildings this list will specifically identify those who are to receive building keys.

**Special Events:** Special events, such as plant sales, shows, educational programs and community events, which will use additional areas of the facility are permitted, subject to the approval of the University. Use of the facility can be scheduled through the Facility Manager. Additional fees may be charged to cover related costs to the University, such as staff time, rubbish removal, etc.

# Operational Rules for Organizations Using the Grounds and Land

**Facility Access:** The grounds are open to licensees from 6 AM - dark. Cars are to be driven onto grass areas only to load and unload materials or for handicapped access. Parking areas for handicapped access will be identified in advance.

**Staff Services:** University staff are responsible for operation and maintenance of the facility. University staff do not provide plant production or administrative services. Each organization must provide their own labor and related services.

Rubbish and Organic Materials Removal: Licensee is responsible for removing rubbish and recyclable materials to dumpsters and/or receptacles for recycling. Plant waste and related organic materials are to be discarded in areas identified by the facility manager.

**Site Maintenance & Appearance:** Assigned area must appear neat, clean, and orderly throughout the year. Refuse cannot be left at the site. End of the season clean-up is required. Details for clean-up and closing of land operations will be provided.

Water and Utilities: Water is generally provided to each site. Water conservation must be practiced. Water leaks are to be reported to the Facility Manager. All groups using more than an acre of land and the community garden group (GROW) will provide their own water meter in order to monitor use. The University will limit water use as deemed necessary.

Alterations and Changes in Use of the Land: The land can only be used for the purpose stated in the application form and Agreement. Any changes in use or changes to the land or landscape must be requested in writing to the Facility Manager. This includes pruning any surrounding trees or shrubs and adding structures, fencing, trellises or related items.

**Signage:** Small descriptive signs are to be posted at the site, identifying the organization, use of the land (purpose) and contact person for further information.

**Contacts and Communications:** All issues related to building and facility use should be brought to the attention of the Facility Manager, Tony Mazzeo.

Joe Shoenfeld
Associate Director, UMass Center for Agriculture, Food and the Environment
July, 2018



**UMass Extension** Mass. Water Resources Research Center Mass.Agricultural Experiment Station UMass Research and Education Farms

Office of the Director • Stockbridge Hall • 80 Campus Center Way • Amherst, MA 01003-9246 • p: 413.545.4800 • f: 413.545.6555 • ag.umass.edu

July 26, 2018

Ms. Shannon Taylor **Executive Director** Community Farms Outreach 240 Beaver Street Waltham, MA 02452

Dear Shannon,

Enclosed please find a license agreement for land and offices at Waltham for the period of July 1, 2018 -June 30, 2019.

The rental rates reflected in the License Agreement follow:

Two offices: rooms 7 & 8	\$5000
Two offices: rooms 9 & 10	\$3,500
One office: room 1	\$3,500
Store room # 2	\$600
Land and utilities for two greenhouses	\$3,000
Eight and one quarter (8.25) acres of land	\$4,950
Total	\$20,550

Please note that there is a copy of Exhibit B attached to this agreement. Please note that the only substantive change to this document from the past is the addition, in the fourth rule listed, of the sentence: "All persons having regular access to the building must be over the age of 18."

Please sign and return one copy of the license agreement to me along with a copy of insurance certificates for liability and workman's compensation (if applicable). An invoice will then be sent from our business office.

Please let me know if you have any questions regarding the license or invoice information.

Sincerely,

Evan Pacosa

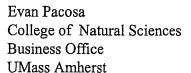
College of Natural Sciences

Gran Parosu

**Business Office** 



October 15, 2018





local food for everyone

Dear Evan,

Enclosed please find a copy of the signed license agreement for Community Farms Outreach, d/b/a Waltham Fields Community Farm for the period of July 1, 2018 - December 31, 2019.

Also enclosed, please find:

- Payment in the amount of \$20,550.00 for the period of July 1, 2018 June 30, 2019
- A certified and signed invoice from UMass for the period of July 1, 2018 June 30, 2019 An invoice for 2019 rental of office space, storage space and land usage for the period of July 1, 2019 to December 31, 2019 will be invoiced by the University in June 2019 (as agreed).
- Certificate of Liability Insurance

Thank you for your assistance with the previous revisions of this agreement.

Be well,

Stacey Daley

**Executive Director** 

stacey@communtiyfarms.org



# University of Massachusetts /Amherst

	In	voice	Through Administrative Computing		
DEPARTMENT:	Center of Agriculture 318D Stockbridge Hall 80 Campus Center Way	Purchase Order #: N/A			
BUILDING:	Amherst, Ma 01003	Vendor's Code: N/A			
ATTN: Evan Pacosa 413-545-2262		Invoice #: 07012018			
		Date: 10/01/2018			
Name and Address Of Vendor:	Community Farms Outreach aka Waltham Fields c/o Stacey Daley 240 Beaver Street Waltham, MA 02452	Vendor's Certification: I certify that the goods were shippe Rendered as set forth below.  (please fign in			
Rental office space Beaver Street for by licensee, \$20,5	the period of July 1, 2018 to June.	cated at UMass Waltham Center, 24 30, 2019. Consideration to be paid	AMOUNT 0 \$20,550.00		
Please make che	cks payable to the University of M	Tassachusetts. Phil	115/18 1998 115/18 1998		
		Total Due	\$20,550.00		
Acet: Fund	: Dept. ID: Speed	1# Class: Project/Grant			
Date Goods Rec	eived.	Verified By:			
Date Goods Rec	CIVCU.				

Departmental Approval: Original-Controllers

Copy-Department

# ACORD'

### **CERTIFICATE OF LIABILITY INSURANCE**

OB/15/2018

CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS TIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INBURED, the policy(les) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		C	ONFACT AME:				
FRANK BINGHAM		9	PHONE 781-255-2002 (A)C, No. 255-2002				1874
1408 PROVIDENCE HWY			MAIL FRANK, B	INGHAM®'	VERIZON.NET		
SUTIE-130		r	INSURER(S) AFFOROMÓ COVERAGE				NAIC #
NORWOOD, MA 02062		-					
HSURED			DISJURER A : FARM FAMILY CASUALTY				
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COMMUNITY FARMS OUT	KEWOU		ISURER C :		·····		
240 BEAVER STREET	n		ISURER D :	<del></del>			
WALTHAM, MA 02452-802	<i>Z</i> .	ļ	BURER 5 :				
OVERAGES CERT		E NUMBER:	BURER F1		REVISION NUMBER:		
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ERTIFICATE HOLDER		C	ANCELLATION				
UNIVERSITY OF MASSACHUSETTS 333 SOUTH STREET, SUITE #450			SHOULD ANY OF THE ABOVE DESCRIBED POLICIES SE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.				
SHREWSBURY, MA 01545 USA			Mancis & Blance				

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### SECOND EXTENSION OF LICENSE AGREEMENT

This Second Extension of License Agreement ("Second Extension") is made on December 15, 2020 by and between the University of Massachusetts Amherst ("University") and the Federation of Massachusetts Farmers Markets ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 1, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. Section 5 (TERM): The term of the Agreement shall be extended on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. Section 7 (FEE): In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to the University a fee in the amount of Six Hundred Sixty-six Dollars and Sixty-seven cents (\$666.67) per month.
- 3. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Second Extension as of the date first written above.

### UNIVERSITY:

UNIVERSITY OF MASSACHSETTS

By: Andrew P. Mangels

Title: Vice Chancellor for Administration and Finance

#### LICENSEE:

FEDERATION OF MASSACHUSETTS FARMERS MARKETS

By: Cdith Murnans

Name: Edith Murname
Title: Executive Director

## FMFM - Extension 2

Final Audit Report

2021-01-04

Created:

2020-12-29

By:

Mass Farmers Markets (tech@massfarmersmarkets.org)

Status:

Signed

Transaction ID:

CBJCHBCAABAAwmwRlxvCv4VR9BUZ2k9yfBqvyhB2xM4G

## "FMFM - Extension 2" History

- Document created by Mass Farmers Markets (tech@massfarmersmarkets.org) 2020-12-29 4:22:48 PM GMT- IP address: 209.6.177,253
- Document emailed to dmarshall@facil.umass.edu for signature 2020-12-29 4:23:57 PM GMT
- Email viewed by dmarshall@facil.umass.edu 2021-01-04 3:10:26 PM GMT- IP address: 128.119.185.194
- Document signing delegated to Andrew Mangels (amangels@admin.umass.edu) by dmarshall@facil.umass.edu 2021-01-04 3:20:46 PM GMT- IP address: 128.119.185.194
- Document emailed to Andrew Mangels (amangels@admin.umass.edu) for signature 2021-01-04 3:20:47 PM GMT
- Email viewed by Andrew Mangels (amangels@admin.umass.edu) 2021-01-04 6:18:57 PM GMT- IP address: 24.62.200.107
- Document e-signed by Andrew Mangels (amangels@admin.umass.edu)
  Signature Date: 2021-01-04 6:19:22 PM GMT Time Source: server- IP address: 24.62.200.107
- Agreement completed.2021-01-04 6:19:22 PM GMT

#### FIRST EXTENSION OF LICENSE AGREEMENT

This First Extension of License Agreement ("First Extension") is made on October 15, 2020 by and between the University of Massachusetts Amherst ("University") and the Federation of Massachusetts Farmers Markets ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 1, 2018, for the Premises at 240 Beaver Street in Waltham. Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. Section I (REFERENCE DATA) of the Agreement shall be modified by inserting the following text on its own line after the words "Room 374": "181 Presidents Drive", into the Mailing Address of the University.
- 2. Section 1 (REFERENCE DATA) is hereby amended by adding room 124 to the Premises listing.
- 3. Section 5 (TERM): The term of the Agreement shall be extended through December 31, 2020.
- 4. Section 7 (FEE): In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to the University a fee in the amount of Eight Thousand and 00/100 Dollars (\$8,000.00), payable in advance in monthly installments of Six Hundred Sixty-six Dollars and Sixty-seven cents (\$666.67) per month.
- 5. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

#### [SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

UNIVERSITY:

UNIVERSITY OF MASSACHSETTS

By: lndrw P. Mangels

Name: Andrew P. Mangels

Title: Vice Chancellor for Administration and Finance

LICENSEE:

FEDERATION OF MASSACHUSETTS FARMERS MARKETS

By: Edith-Murname MURNANE

Title: Executive Director

# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of office space at the UMass Eastern Massachusetts Outreach Center. This agreement is between <u>Federation of Massachusetts</u> <u>Farmers' Markets</u> (hereinafter Licensee), and the University of Massachusetts (hereinafter referred to as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver Street in Waltham and further described in Section 2 of this Agreement; and

WHEREAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

#### 1. REFERENCE DATA:

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee:

Jeffery Cole, Executive Director Federation of Massachusetts Farmers' Markets 240 Beaver Street Waltham, MA 02453

Premises: Room # 123, 125, & 214 in the Main Administration Building

Permitted Use: Rooms to be used as an office to conduct FMFM business.

Term of Agreement: One Year

Consideration to be paid by Licensee: \$8,000.00

#### 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at See # 7 below.

#### 3. PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: The farm land will be used to harvest, sell, and distribute food consistent with the mission of this organization. The direct sale of farm products will be limited to the normal seasonal hours of distribution of CSA farm shares to members. A portion of the produce will be provided to people in need of food assistance. The land is also used to for education for school and camp groups, as well as for the general public.

Specific rules governing access to and use of these facilities are attached as **Exhibit B** and are binding upon both parties.

#### 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use.

#### 5. TERM

Term of Agreement: July 1, 2018 to June 30, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

#### HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

#### 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

\$8,000 for use of Room # 123, 125, & 214 in the Main Administration Building.

#### 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

#### 9. ALTERATION OF THE PREMISES

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as **Exhibit C**. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

#### 10. LICENSEE'S EQUIPMENT

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

#### 11. UTILITIES

The University shall provide janitorial services for common areas of the buildings and general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

#### 12. CONDUCT OF LICENSEE

#### Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by duly designated personnel of the University.

#### Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

#### Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

#### Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in **Exhibit B**.

#### Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

#### Cost of Operations

Except as otherwise expressly set forth in this Agreement, Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

#### Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

#### Hazardous Materials

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert Schrader.

#### Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement, Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

#### Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1<sup>st</sup>) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

#### 13. INDEMNIFICATION

Not Applicable

#### 14. RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage caused by any act of Licensee's invitees or members of the general public.

#### 15. INSURANCE

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

A. Comprehensive public liability insurance in an amount as required by Massachusetts law.

- B. Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an amount as required by Massachusetts law.
- C. Workers Compensation Insurance covering Licensee's employees upon the Premises in such amounts as are required by law.
- D. Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as **Exhibit D**.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

#### 16. <u>ASSIGNMENT</u>

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

#### 17. RIGHTS OF UN<u>IVERSITY AND AGENCY TO ENTER</u>

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

#### 18. <u>TERMINATION</u>

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause.</u> Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. <u>For Cause</u>. If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period

during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.

C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18, Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

#### 19. NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

#### 20. NON-DISCRIMINATION

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in

employment.

#### 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

#### 22. MISCELLANEOUS PROVISIONS

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

unless such waiver is in writing and is signed by the party to be charged. This Agreement is to take effect as a sealed instrument. The following exhibits and attachments are made a part of this Agreement for all purposes: Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee X Exhibit B - Specific Rules Governing Access and Use of Facility Exhibit C - Schedule of Permitted Alterations and Improvements X Exhibit D - Insurance Certificate(s) AGREED AND ACCEPTED **UNIVERSITY OF** LICENSEE: **MASSACHUSETTS:** Authorized Signature Signature Joe Shoenfeld, Associate Director Jeffery Cole, Executive Director Center for Agriculture, Food and the Federation of Massachusetts Farmers' Environment Markets University of Massachusetts Date Date

No provision of this Agreement shall be deemed to have been waived by either party

#### SECOND EXTENSION OF LICENSE AGREEMENT

This Second Extension of License Agreement ("Second Extension") is made on December 15, 2020 by and between the University of Massachusetts Amherst ("University") and Green Rows of Waltham ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. TERM: The term of the Agreement shall be extended on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of One Hundred Dollars (\$100.00) per month.
- 3. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Second Extension as of the date first written above.

#### UNIVERSITY:

UNIVERSITY OF MASSACHSETTS

By: \_\_\_\_\_ludrw f. Mangels
Name: Andrew P. Mangels

Title: Vice Chancellor for Administration and Finance

LICENSEE:

GREEN ROWS OF WALTHAM

Olando Name: Ailene Orlando

Title: Treasurer

#### FIRST EXTENSION OF LICENSE AGREEMENT

This First Extension of License Agreement ("First Extension") is made on <u>April 30, 2020</u> by and between the University of Massachusetts Amherst ("University") and Green Rows of Waltham ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- Section 1 (Reference Data) of the Agreement shall be modified by deleting the Mailing Address of the University currently listed and replacing same with: "Steven Goodwin, Whitmore Administration Building Room 347, 181 Presidents Drive, Amherst, MA 01003".
- 2. TERM: The term of the Agreement shall be extended through December 31, 2020.
- 3. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of One Thousand Two Hundred and 00/100 Dollars (\$1,200.00), payable in advance in monthly installments of One Hundred Dollars (\$100.00) per month.
- 4. Section 12 (Surrender of Premises) is hereby amended by deleting the following language in its entirety: "However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises."
- 5. Section 12 (Hazardous Materials) is hereby amended to replace "Robert Schrader" with "the University's Environmental Health & Safety Office".
- 6. Section 15 (Insurance) is hereby amended to add the following to the end of the section: "All certificates of insurance from Licensee shall list the University as an additional insured."

- 7. Section 22 (Miscellaneous Provisions) is hereby amended by placing an "X" next to Exhibit A to indicate inclusion of same. Exhibit A showing land licensed is hereby attached and incorporated herein by reference.
- 8. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

#### **UNIVERSITY:**

UNIVERSITY OF MASSACHSETTS

Docusigned by:

By: Andrew P. Mangels

Name: Andrew P. Mangels

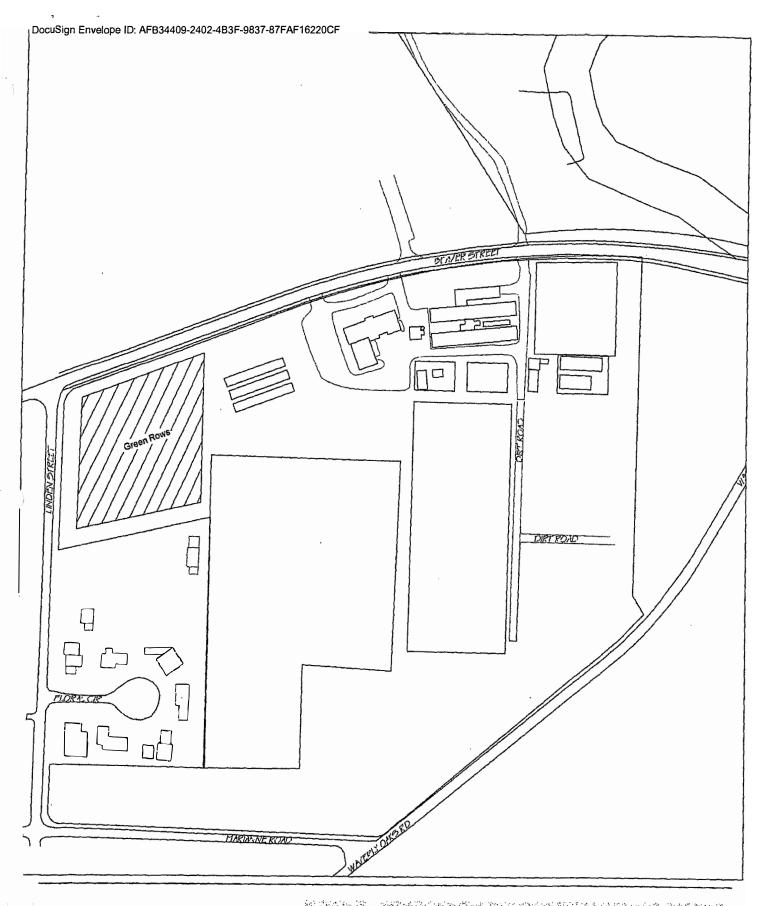
Title: Vice Chancellor for Administration and Finance

LICENSEE:

GREEN ROWS OF WALTHAM

Name: Ailene Orlando

Title: Treasurer



Licensed Land

SCALE: 1"=200" 0 50 100 200 WALTHAM STATION GREEN ROWS

EXHIBIT A - LICENSED LAND

1/24/2020

IlMace Campus Dia-

# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of office space at the UMass Eastern Massachusetts Outreach Center. This agreement is between <u>Green Rows of Waltham</u> (hereinafter Licensee), a <u>community organization</u>, and the University of Massachusetts (hereinafter referred to as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver Street in Waltham and further described in Section 2 of this Agreement; and

WHEREAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

#### 1. REFERENCE DATA:

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee:

Ailene Orlando c/o Green Rows of Waltham 30 Clark Lane Waltham, MA 02451

Premises: 2 acres of farm land.

Permitted Use: Use the land as a community garden for local residents, especially those who have no access to a garden.

Consideration to be Paid by Licensee: \$1,800.00 per year.

#### 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at <u>Northwest area of field, south side of Beaver Street</u>.

#### 3. PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: Use of land for a community garden.

Specific rules governing access to and use of these facilities are attached as **Exhibit B** and are binding upon both parties.

#### 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use.

#### 5. TERM

Term of Agreement: July 1, 2018 to December 31, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

#### 6. HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

#### 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

\$1,800.00

#### 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the

issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

#### 9. ALTERATION OF THE PREMISES

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as **Exhibit C**. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

#### 10. LICENSEE'S EQUIPMENT

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

#### 11. UTILITIES

The University shall provide janitorial services for common areas of the buildings and general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

#### 12. CONDUCT OF LICENSEE

#### Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by

duly designated personnel of the University.

#### Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

#### Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

#### Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in **Exhibit B.** 

#### Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

#### Cost of Operations

Except as otherwise expressly set forth in this Agreement, Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

#### Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

#### Hazardous Materials

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert

Schrader.

#### Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement, Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

#### Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1<sup>st</sup>) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

#### 13. INDEMNIFICATION

Not Applicable

#### 14. RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage caused by any act of Licensee's invitees or members of the general public.

#### 15. INSURANCE

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

- A. Comprehensive public liability insurance in an amount as required by Massachusetts law.
- B. Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an amount as required by Massachusetts law.

- C. Workers Compensation Insurance covering Licensee's employees upon the Premises in such amounts as are required by law.
- D. Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as **Exhibit D**.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

#### 16. ASSIGNMENT

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

#### 17. RIGHTS OF UNIVERSITY AND AGENCY TO ENTER

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

#### 18. TERMINATION

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause</u>. Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. <u>For Cause</u>. If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails

to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.

C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18, Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

#### 19. NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

#### 20. NON-DISCRIMINATION

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in employment.

#### 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

#### 22. MISCELLANEOUS PROVISIONS

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver is in writing and is signed by the party to be charged.

This Agreement is to take effect as a sealed instrument.

The following exhibits and attachments are made a part of this Agreement for all purposes:

Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee

Exhibit B - Specific Rules Governing Access and Use of Facility

Exhibit C - Schedule of Permitted Alterations and Improvements

X Exhibit D - Insurance Certificate(s)

#### AGREED AND ACCEPTED

UNIVERSITY OF MASSACHUSETTS:

LICENSEE:

Signature

Joe Shoenfeld, Associate Director Center for Agriculture, Food and the Environment

University of Massachusetts

Ailene Orlando

Green Rows of Waltham - Treasure

Lilene Oclando
Authorized Signature

10/15/18

Date

<u>10/2</u>5/18 Date



#### **CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

06/25/2019 THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER. IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s). PRODUCER CONTACT NAME: BIKOFSKY INSURANCE AGENCY INC PHONE (A/C, No, Ext): (888) 661-3938 E-MAIL FAX (A/C, No): (877) 872-7604 793 WASHINGTON ST ADDRESS: service.center@travelers.com **NEWTONVILLE, MA 02460** (888) 661-3938 **INSURER(S) AFFORDING COVERAGE** NAIC # INSURER A: THE TRAVELERS INDEMNITY COMPANY OF CONNECTICUT INSURED INSURER B: GROW-GREEN ROWS OF WALTHAM INSURER C: C/O AILENE ORLANDO 30 CLARK LANE INSURER D : WALTHAM, MA 02451 INSURER E : INSURER F: **COVERAGES CERTIFICATE NUMBER: 123639519402671 REVISION NUMBER:** THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. INSR ADDL SUBR POLICY EFF POLICY EXP TYPE OF INSURANCE INSD WVD POLICY NUMBER LIMITS (MM/DD/YYYY) (MM/DD/YYYY) 660-779X2799-19 Х 08/02/2019 08/02/2020 X COMMERCIAL GENERAL LIABILITY EACH OCCURRENCE DAMAGE TO RENTED \$1,000,000 CLAIMS-MADE X OCCUR \$100,000 PREMISES (Ea occurrence) MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GEN'L AGGREGATE LIMIT APPLIES PER: GENERAL AGGREGATE \$2,000,000 PRO- LOC X POLICY \$2,000,000 PRODUCTS - COMP/OP AGG OTHER: COMBINED SINGLE LIMIT (Ea accident) **AUTOMOBILE LIABILITY** BODILY INJURY (Per person) ANY AUTO SCHEDULED AUTOS OWNED AUTOS ONLY **BODILY INJURY (Per accident)** NON-OWNED HIRED AUTOS ONLY PROPERTY DAMAGE (Per accident) AUTOS ONLY Ś UMBRELLA LIAB OCCUR EACH OCCURRENCE ŝ EXCESS LIAB CLAIMS-MADE AGGREGATE \$ DED RETENTION & Ś WORKERS COMPENSATION PER STATUTE ETH-N/A AND EMPLOYERS' LIABILITY
ANY PROPRIETOR/PARTNER/EXECUTIVE
OFFICER/MEMBER EXCLUDED? Y/N E.L. EACH ACCIDENT OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) AS RESPECTS TO GENERAL LIABILITY, CERTIFICATE HOLDER IS ADDITIONAL INSURED - MANAGERS OR LESSORS OF PREMISES, CG 20 11, FOR THE FOLLOWING LOCATION: BEAVER STREET, WALTHAM, MA 02451 **CERTIFICATE HOLDER** CANCELLATION UMASS EXTENSION, UNIVERSITY OF SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE MASSACHUSETTS THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN 101 UNIVERSITY DRIVE ACCORDANCE WITH THE POLICY PROVISIONS. AMHERST, MA 01003 **AUTHORIZED REPRESENTATIVE** Misty Willelman

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Dear Evan,

Enclosed please find the signed page from the 18 month license agreement, July 1, 2018 to December 31, 2019 for GROW, Green Rows of Waltham, for land for our community garden.

I have also enclosed a copy of our insurance certificate of liability and our check in the amount of \$600 representing the first installment of the amount due.

Please feel free to be in touch with me if there is anything else you need. (781-894-8147) Thank you for your help, Evan.

Sincerely,

Ailene Orlando GROW Treasurer

ailen Oclando

#### FIRST EXTENSION OF LICENSE AGREEMENT

This First Extension of License Agreement ("First Extension") is made on <u>January 30, 2020</u> by and between the University of Massachusetts Amherst ("University") and Waltham Land Trust ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018 for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. Section 1 (Reference Data) of the Agreement shall be modified by deleting the Mailing Address of the University currently listed and replacing same with: "Steven Goodwin, Whitmore Administration Building Room 347, 181 Presidents Drive, Amherst, MA 01003".
- 2. TERM: The term of the Agreement shall be extended through December 31, 2020.
- 3. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of Five Thousand and 00/100 Dollars (\$5,000.00), payable in advance in monthly installments of Four Hundred Sixteen Dollars and Sixty-seven cents (\$416.67) per month.
- 4. Section 12 (Surrender of Premises) is hereby amended by deleting the following language in its entirety: "However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1<sup>st</sup>) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises."
- 5. Section 12 (Hazardous Materials) is hereby amended to replace "Robert Schrader" with "the University's Environmental Health & Safety Office".
- 6. Section 15 (Insurance) is hereby amended to add the following to the end of the section: "All certificates of insurance from Licensee shall list the University as an additional insured."
- 7. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved, and shall remain in full force and effect in accordance with its terms.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

# **UNIVERSITY:**

UNIVERSITY OF MASSACHSETTS

Title: Vice Chancellor for Administration and Finance

# LICENSEE:

WALTHAM LAND TRUST

By: Solya Wadman

Name: Sonja Wadman

Title: Executive Director

#### SECOND EXTENSION OF LICENSE AGREEMENT

This Second Extension of License Agreement ("Second Extension") is made on December 15, 2020 by and between the University of Massachusetts Amherst ("University") and Waltham Land Trust ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018 for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. TERM: The term of the Agreement shall be extended on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of Four Hundred Sixteen Dollars and Sixty-seven cents (\$416.67) per month.
- 3. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved, and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Second Extension as of the date first written above.

# **UNIVERSITY:**

UNIVERSITY OF MASSACHSETTS

By: \_\_\_\_\_\_lndrw f. Mangels
Name: Andrew P. Mangels

Title: Vice Chancellor for Administration and Finance

LICENSEE:

WALTHAM LAND TRUST

Name: Marc Rudnick

Title: Treasurer

# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of office space at the UMass Eastern Massachusetts Outreach Center. This agreement is between <u>Waltham Land Trust</u> (hereinafter Licensee), a <u>non profit corporation</u>, and the University of Massachusetts (hereinafter referred to as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver Street in Waltham and further described in Section 2 of this Agreement; and

WHEREAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

# 1. REFERENCE DATA:

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee:

Marc Rudnick, Treasurer Waltham Land Trust P.O. Box 541120 Waltham, MA 02454

Premises: Use of the Office # 104 & 105. These rooms are located in the main building at 240 Beaver Street, Waltham, MA.

Permitted Use: Waltham Land Trust, Inc. is a non-profit corporation dedicated to preserving our community's natural resources for the future through education, open space acquisition and protection. The office will be used for administrative functions related to the mission of the organization.

# 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at Rooms 104 & 105.

#### 3. PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: The office will be used for administrative functions related to the mission of the organization.

Specific rules governing access to and use of these facilities are attached as  $\mathbf{Exhibit} \mathbf{B}$  and are binding upon both parties.

# 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use.

#### 5. TERM

Term of Agreement: July 1, 2018 to December 31, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

# 6. HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

#### 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

\$7,500.00

# 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the

issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

# 9. ALTERATION OF THE PREMISES

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as **Exhibit C**. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

#### 10. LICENSEE'S EOUIPMENT

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

#### 11. <u>UTILITIES</u>

The University shall provide janitorial services for common areas of the buildings and general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

# 12. CONDUCT OF LICENSEE

# Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by

duly designated personnel of the University.

# Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

# Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

#### Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in **Exhibit B.** 

#### Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

#### Cost of Operations

Except as otherwise expressly set forth in this Agreement, Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

# Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

#### <u>Hazardous Materials</u>

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert

Schrader.

#### Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement, Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

#### Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

#### 13. INDEMNIFICATION

Not Applicable

#### 14. RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage caused by any act of Licensee's invitees or members of the general public.

# 15. <u>INSURANCE</u>

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

- A. Comprehensive public liability insurance in an amount as required by Massachusetts law.
- B. Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an amount as required by Massachusetts law.

- C. Workers Compensation Insurance covering Licensee's employees upon the Premises in such amounts as are required by law.
- D. Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as **Exhibit D**.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

# 16. ASSIGNMENT

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

# 17. RIGHTS OF UNIVERSITY AND AGENCY TO ENTER

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

# 18. <u>TERMINATION</u>

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause</u>. Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. For Cause. If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails

to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.

C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18, Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

# 19. NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

#### 20. NON-DISCRIMINATION

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in employment.

#### 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

# 22. <u>MISCELLANEOUS PROVISIONS</u>

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver is in writing and is signed by the party to be charged.

This Agreement is to take effect as a sealed instrument.

The following exhibits and attachments are made a part of this Agreement for all purposes:

Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee

Exhibit B - Specific Rules Governing Access and Use of Facility

Exhibit C - Schedule of Permitted Alterations and Improvements

X Exhibit D - Insurance Certificate(s)

#### AGREED AND ACCEPTED

UNIVERSITY OF MASSACHUSETTS:

LICENSEE:

Signature

Joe Shoenfeld, Associate Director Center for Agriculture, Food and the Environment University of Massachusetts

RUNIS Date Authorized Signature

Marc Rudnick, Treasurer Waltham Land Trust Exhibit B Use of Grounds and Land at UMass Waltham, 240 Beaver Street, Waltham, Mass.

# Specific Rules Governing Access To and Use of Facility

The following rules apply to use of the facility. All communications related to compliance with use rules and requests for permitted variances should be directed to Facility Manager (Tony Mazzeo) at the facility.

#### **General Rules:**

**Civility and Adherence to Rules:** Licensees are responsible for actions of their staff, guests and general public invited onto premises. Licensee is responsible for ensuring compliance with all facility rules.

**Hours of Operation:** Facility is open to licensees and their guests. The building is accessible from 6 AM-11 PM. Outside grounds are accessible from 6 AM till dark.

**Parking:** Parking is generally available in lots surrounding the building. No parking is allowed on the grass without prior approval. No vehicles are to be left overnight without prior approval.

Persons Authorized to Have Access to Facility: Each licensee is to provide to the Facility Manager a list of persons who will have regular access to the facility. All persons having regular access to the building must be over the age of 18. For persons utilizing space within the buildings this list will specifically identify those who are to receive building keys.

**Special Events:** Special events, such as plant sales, shows, educational programs and community events, which will use additional areas of the facility are permitted, subject to the approval of the University. Use of the facility can be scheduled through the Facility Manager. Additional fees may be charged to cover related costs to the University, such as staff time, rubbish removal, etc.

# Operational Rules for Organizations Using the Grounds and Land

**Facility Access:** The grounds are open to licensees from 6 AM - dark. Cars are to be driven onto grass areas only to load and unload materials or for handicapped access. Parking areas for handicapped access will be identified in advance.

**Staff Services:** University staff are responsible for operation and maintenance of the facility. University staff do not provide plant production or administrative services. Each organization must provide their own labor and related services.

**Rubbish and Organic Materials Removal:** Licensee is responsible for removing rubbish and recyclable materials to dumpsters and/or receptacles for recycling. Plant waste and related organic materials are to be discarded in areas identified by the facility manager.

**Site Maintenance & Appearance:** Assigned area must appear neat, clean, and orderly throughout the year. Refuse cannot be left at the site. End of the season clean-up is required. Details for clean-up and closing of land operations will be provided.

Water and Utilities: Water is generally provided to each site. Water conservation must be practiced. Water leaks are to be reported to the Facility Manager. All groups using more than an acre of land and the community garden group (GROW) will provide their own water meter in order to monitor use. The University will limit water use as deemed necessary.

Alterations and Changes in Use of the Land: The land can only be used for the purpose stated in the application form and Agreement. Any changes in use or changes to the land or landscape must be requested in writing to the Facility Manager. This includes pruning any surrounding trees or shrubs and adding structures, fencing, trellises or related items.

**Signage:** Small descriptive signs are to be posted at the site, identifying the organization, use of the land (purpose) and contact person for further information.

**Contacts and Communications:** All issues related to building and facility use should be brought to the attention of the Facility Manager, Tony Mazzeo.

Joe Shoenfeld
Associate Director, UMass Center for Agriculture, Food and the Environment
July, 2018

#### SECOND EXTENSION OF LICENSE AGREEMENT

This Second Extension of License Agreement ("Second Extension") is made on December 15, 2020 by and between the University of Massachusetts Amherst ("University") and Grow Native Massachusetts ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. TERM: The term of the Agreement shall be extended on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of Four Hundred Sixteen Dollars and Sixty-seven cents (\$416.67) per month.
- 3. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Second Extension as of the date first written above.

# **UNIVERSITY:**

UNIVERSITY OF MASSACHSETTS

Title: Vice Chancellor for Administration and Finance

LICENSEE:

GROW NATIVE MASSACHUSETTS

Name: Mark D. Smith

Title: President

# FIRST EXTENSION OF LICENSE AGREEMENT

This First Extension of License Agreement ("First Extension") is made on <u>January 30, 2020</u> by and between the University of Massachusetts Amherst ("University") and Grow Native Massachusetts ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- Section 1 (Reference Data) of the Agreement shall be modified by deleting the Mailing Address of the University currently listed and replacing same with: "Steven Goodwin, Whitmore Administration Building Room 347, 181 Presidents Drive, Amherst, MA 01003".
- 2. TERM: The term of the Agreement shall be extended through December 31, 2020.
- 3. PREMISES: Rooms 207 and 208 are added to the rooms available for use by the Licensee.
- 4. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of Five Thousand and 00/100 Dollars (\$5,000.00), payable in advance in monthly installments of Four Hundred Sixteen Dollars and Sixty-seven cents (\$416.67) per month.
- 5. Section 12 (Surrender of Premises) is hereby amended by deleting the following language in its entirety: "However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises."
- 6. Section 12 (Hazardous Materials) is hereby amended to replace "Robert Schrader" with "the University's Environmental Health & Safety Office".
- 7. Section 15 (Insurance) is hereby amended to add the following to the end of the section: "All certificates of insurance from Licensee shall list the University as an additional insured."

8. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

UNIVERSITY:

UNIVERSITY OF MASSACHSETTS

Name Andrew P. Manuels

Title: Vice Chancellor for Administration and Finance

LICENSEE:

GROW NATIVE MASSACHUSETTS

Name: Mark D. Smith

Title: President

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# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of office space at the UMass Eastern Massachusetts Outreach Center. This agreement is between <u>Grow Native Massachusetts</u> (hereinafter Licensee), a <u>non profit corporation</u> and the University of Massachusetts (hereinafter referred to as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver Street in Waltham and further described in Section 2 of this Agreement; and

WHEREAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

# 1. REFERENCE DATA:

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee:

Grow Native Massachusetts c/o Claudia Thompson 240 Beaver Street Waltham, MA 02453

Premises: Use of one office. These rooms, number 203 & 204, are located on the 2<sup>nd</sup> floor of the main building and demonstration garden area (approximately 50FT x 100FT) located in the "Rose Garden" area at 240 Beaver Street, Waltham, MA.

Permitted Use: The office will be used for administrative functions related to the mission of the organization. The garden will be used to demonstrate sustainable plantings.

#### 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at <u>room 203 & 204</u>.

#### 3. PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: The office will be used for administrative functions related to the mission of the organization.

Specific rules governing access to and use of these facilities are attached as **Exhibit B** and are binding upon both parties.

#### 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use.

#### 5. TERM

Term of Agreement: July 1, 2018 to December 31, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

#### 6. HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

#### 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

\$7,500.00

#### 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the

issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

# 9. ALTERATION OF THE PREMISES

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as **Exhibit C**. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

# 10. LICENSEE'S EQUIPMENT

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

# 11. UTILITIES

The University shall provide janitorial services for common areas of the buildings and general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

# 12. CONDUCT OF LICENSEE

# Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by

duly designated personnel of the University.

# Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

# Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

#### Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in **Exhibit B.** 

#### Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

#### Cost of Operations

Except as otherwise expressly set forth in this Agreement, Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

#### Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

# Hazardous Materials

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert

Schrader.

#### Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement, Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

# Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

# 13. INDEMNIFICATION

Not Applicable

# 14. RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage caused by any act of Licensee's invitees or members of the general public.

# 15. <u>INSURANCE</u>

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

- A. Comprehensive public liability insurance in an amount as required by Massachusetts law.
- B. Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an amount as required by Massachusetts law.

- C. Workers Compensation Insurance covering Licensee's employees upon the Premises in such amounts as are required by law.
- D. Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as **Exhibit D**.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

# 16. ASSIGNMENT

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

#### 17. RIGHTS OF UNIVERSITY AND AGENCY TO ENTER

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

#### 18. TERMINATION

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause</u>. Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. <u>For Cause</u>. If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails

to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.

C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18, Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

# 19. NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

#### 20. NON-DISCRIMINATION

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in employment.

# 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

#### 22. MISCELLANEOUS PROVISIONS

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver is in writing and is signed by the party to be charged.

This Agreement is to take effect as a sealed instrument.

The following exhibits and attachments are made a part of this Agreement for all purposes:

Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee

X Exhibit B - Specific Rules Governing Access and Use of Facility

Exhibit C - Schedule of Permitted Alterations and Improvements

Exhibit D - Insurance Certificate(s)

# AGREED AND ACCEPTED

**UNIVERSITY OF MASSACHUSETTS:**  LICENSEE:

Joe Shoenfeld, Associate Director Center for Agriculture, Food and the Environment

University of Massachusetts

Claudia Thompson

Authorized Signature

Grow Native Massachusetts

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Exhibit B Use of Grounds and Land at UMass Waltham, 240 Beaver Street, Waltham, Mass.

#### Specific Rules Governing Access To and Use of Facility

The following rules apply to use of the facility. All communications related to compliance with use rules and requests for permitted variances should be directed to Facility Manager (Tony Mazzeo) at the facility.

#### General Rules:

**Civility and Adherence to Rules:** Licensees are responsible for actions of their staff, guests and general public invited onto premises. Licensee is responsible for ensuring compliance with all facility rules.

**Hours of Operation:** Facility is open to licensees and their guests. The building is accessible from 6 AM-11 PM. Outside grounds are accessible from 6 AM till dark.

**Parking:** Parking is generally available in lots surrounding the building. No parking is allowed on the grass without prior approval. No vehicles are to be left overnight without prior approval.

**Persons Authorized to Have Access to Facility:** Each licensee is to provide to the Facility Manager a list of persons who will have regular access to the facility. All persons having regular access to the building must be over the age of 18. For persons utilizing space within the buildings this list will specifically identify those who are to receive building keys.

**Special Events:** Special events, such as plant sales, shows, educational programs and community events, which will use additional areas of the facility are permitted, subject to the approval of the University. Use of the facility can be scheduled through the Facility Manager. Additional fees may be charged to cover related costs to the University, such as staff time, rubbish removal, etc.

#### Operational Rules for Organizations Using the Grounds and Land

**Facility Access:** The grounds are open to licensees from 6 AM - dark. Cars are to be driven onto grass areas only to load and unload materials or for handicapped access. Parking areas for handicapped access will be identified in advance.

**Staff Services:** University staff are responsible for operation and maintenance of the facility. University staff do not provide plant production or administrative services. Each organization must provide their own labor and related services.

**Rubbish and Organic Materials Removal:** Licensee is responsible for removing rubbish and recyclable materials to dumpsters and/or receptacles for recycling. Plant waste and related organic materials are to be discarded in areas identified by the facility manager.

**Site Maintenance & Appearance:** Assigned area must appear neat, clean, and orderly throughout the year. Refuse cannot be left at the site. End of the season clean-up is required. Details for clean-up and closing of land operations will be provided.

Water and Utilities: Water is generally provided to each site. Water conservation must be practiced. Water leaks are to be reported to the Facility Manager. All groups using more than an acre of land and the community garden group (GROW) will provide their own water meter in order to monitor use. The University will limit water use as deemed necessary.

Alterations and Changes in Use of the Land: The land can only be used for the purpose stated in the application form and Agreement. Any changes in use or changes to the land or landscape must be requested in writing to the Facility Manager. This includes pruning any surrounding trees or shrubs and adding structures, fencing, trellises or related items.

**Signage:** Small descriptive signs are to be posted at the site, identifying the organization, use of the land (purpose) and contact person for further information.

**Contacts and Communications:** All issues related to building and facility use should be brought to the attention of the Facility Manager, Tony Mazzeo.

Joe Shoenfeld Associate Director, UMass Center for Agriculture, Food and the Environment July, 2018

# INFORMATION PAGE WORKERS COMPENSATION AND EMPLOYERS LIABILITY POLICY

INSURER: The Hartford Fire Insurance Company
ONE HARTFORD PLAZA HARTFORD CT 06155



NCCI Company Number: Company Code: 1

13269

POLICY NUMBER:

**Previous Policy Number:** 

02 WEC CR4707 02 WEC CR4707 Suffix LARS RENEWAL

1. Named Insured and Mailing Address:

GROW NATIVE MASSACHUSETTS, INC.

(No., Street, Town, State, Zip Code)

240 BEAVER ST WALTHAM MA 02452

FEIN Number: 27-3673855 State Identification Number(s):

The Named Insured is: Non Profit

Business of Named Insured: Other Social Advocacy Organizations

Other workplaces not shown above: 240 BEAVER STREET

WALTHAM MA 02452

2. Policy Period:

From 09/25/18

09/25/19

ANNUAL

12:01 a.m., Standard time at the insured's mailing address.

Producer's Name:

INSURANCE PROVIDER GROUP/PHS 100 GREAT MEADOWS RD STE 705

WETHERSFIELD CT 06109

Producer's Code:

02023411

Issuing Office:

THE HARTFORD BUSINESS SERVICE CENTER

To

3600 WISEMAN BLVD SAN ANTONIO TX 78251

(866) 467-8730

Total Estimated Annual Premium:

\$267

Deposit Premium: Policy Minimum Premium:

\$181 MA

Audit Period: ANNUAL

Installment Term: Full Pay (100%Down)

The policy is not binding unless countersigned by our authorized representative.

Countersigned by

Sugan S. Castanuda

Authorized Representative

08/16/18

Date

Form WC 00 00 01 A

(1) Printed in U.S.A.

Page 1 (Continued on marks)



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 09/07/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed.

	SUBROGATION IS WAIVED, subject to							an endorsement. A state	ement o	on
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	W DBA Insurance Provider Group				NAME:   WILCITED FINITIONS     PHONE   (A/C, No.): (860)372-4972   (A/C, No.): (A/C,					
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240 Beaver St.					INSURER D:					
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Waltham MA 02452					INSURER F:					
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# MEMORANDUM OF AGREEMENT AND GRANT OF LICENSE

This Memorandum of Agreement and Grant of License is entered into on this 26<sup>th</sup> day of May, 2021 by and between the **University of Massachusetts Amherst**, having an address of 181 Presidents Drive, Amherst, Massachusetts 01003 (the "University" or "Licensor"), and **Tufts University c/o Colin Orians**, having an address of 364 Robinson Hall, 200 College Avenue – Tufts University, Medford, MA 02155 (the "Licensee"). The University and the Licensee may be referred to herein collectively as the "Parties".

WHEREAS, the University is the owner of certain property located at 240 Beaver Street, Waltham, Massachusetts (the "University Property");

WHEREAS, the Licensee desires to use approximately one (1) acre of the University Property for irrigation testing (the "Licensed Premises"). The Licensed Premises is depicted in **Exhibit A**, attached hereto and incorporated herein by reference.

WHEREAS, the University is amenable to granting the Licensee the foregoing rights, subject to the terms and conditions set forth below;

NOW, THEREFORE, in exchange for the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged by the Parties, the Parties agree as follows:

- 1. <u>Term of License</u>. The Term of this License shall begin on June 1, 2021 and shall thereafter continue on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. <u>Terms of Use; Permitted Use</u>. The Licensee may enter and use the Licensed Premises at any time and from time to time during the Term for irrigation testing and related work ("Permitted Use"). The Licensee shall not interfere unreasonably with the use of the University Property by the University and others entitled thereto and shall comply with any reasonable rules and regulations governing the use of the University Property.
- 3. <u>Fee.</u> In exchange for the rights granted herein, Licensee shall pay Fifty Dollars (\$50.00) per month to the University on or before the first of each month, beginning on June 1, 2021.
- 4. Release, Indemnification. The University makes no representations or warranties as to the condition of the Licensed Premises. The Licensee releases and holds the University harmless against any claim by any of the Licensee for any injury or damage arising from said entry. The Licensee shall defend, indemnify and hold harmless the University from any and all liabilities, damages, loss, costs expenses (including reasonable attorneys' fees), causes of action, suits, claims, demands or judgments arising out of or related to the negligence of any of the Licensee in connection with said entry, and/or other activities undertaken in connection with this License, the exercise of the rights granted by this License, or the release, emission, storage or maintenance by any of the Licensee of any Hazardous Materials on or near the Licensed

Premises during said entry, or activities undertaken in connection with this License. The provisions contained in this Section shall survive the expiration or termination of this License.

- 5. <u>Insurance</u>. The Licensee shall obtain public liability insurance, including coverage for bodily injury, wrongful death and property damage, in the minimum amount set forth herein to support the Licensee's Permitted Use of the Licensed Premises under the terms and conditions of this License, to indemnify, defend and hold harmless the University: General Liability: \$1,000,000.00/occurrence, \$2,000,000.00/aggregate; Bodily Injury Liability: \$1,000,000.00/occurrence, \$2,000,000.00/aggregate. Prior to entering the University Property the Licensee shall provide the University with a copy of such insurance policy in each case indicating the University is an additional insured on the policy and showing compliance with the foregoing provisions. The insurance coverage required hereunder shall be issued by insurance companies licensed by the Massachusetts Division of Insurance to do business in the Commonwealth of Massachusetts and having a Best's rating of B+ or better. The Licensee also shall obtain Vehicle Liability Insurance covering each vehicle of Licensee entering University Property in an amount not less than the compulsory coverage required in Massachusetts. The Licensee's failure to carry insurance shall be a material default of this License.
- 6. <u>Termination</u>. Either party may terminate this License upon thirty (30) days prior written notice to the other party.
- 7. <u>Surrender</u>. In the event that this License expires or is terminated, the Licensee shall, at its own expense, remove all its facilities, apparatus, equipment and property from the Licensed Premises, and shall restore the Licensed Premises to their original condition as at the commencement of this License, as nearly as possible. This obligation shall survive the expiration or termination of this License.
- 8. The Licensee shall not use, generate, store or dispose of any Hazardous Materials on, under, about or within the Licensed Premises in violation of any law or regulation. As used in this paragraph, "Hazardous Material" shall mean any oil, hazardous waste, substances or materials, or pollutants, as such terms are defined under any existing or future statutory or common law (including but not limited to Comprehensive Environmental, Response, Compensation and Liability Act, 42 U.S.C. 9601 et seq., the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq., the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, G.L. c. 21E, and all applicable rules and regulations promulgated thereunder).
- 9. <u>Authorized Representatives</u>. In any case in which an approval, decision or permission is needed from one of the parties pursuant to this License or in connection with the matters contemplated herein, the following persons are authorized hereby to give such approval, decision or permission for the respective party:

# For the University:

Name:

Steven Goodwin, Deputy Chancellor

Address:

Room 374, Whitmore Administration Building

181 Presidents Drive, Amherst, MA 01003

Email:

sgoodwin@cns.umass.edu

#### For the Licensee:

Name:

Tufts University c/o Colin Orians

Boston Area Climate Experiment

Address:

364 Robinson Hall

200 College Avenue - Tufts University

Medford, MA 02155

Telephone:

617-627-3543

Email:

colin.orians@tufts.edu

- No Estate or Obligation Created. This License shall not be construed as creating 10. or vesting in the Licensee any estate in the Property, but only the limited right of use as hereinabove stated.
- 11. Modifications and Amendments. Modifications or amendments to this License shall be in writing and duly executed by all the parties hereto to be effective.
- 12. Governing Law. This License shall be governed and construed in accordance with the laws of the Commonwealth of Massachusetts.
- Entire Agreement. This License represents the entire agreement between the Parties and supersedes all other written or unwritten agreements between the Parties.

IN WITNESS THEREOF, the parties have signed this Memorandum of Agreement on the date first written above.

**TUFTS UNIVERSITY** 

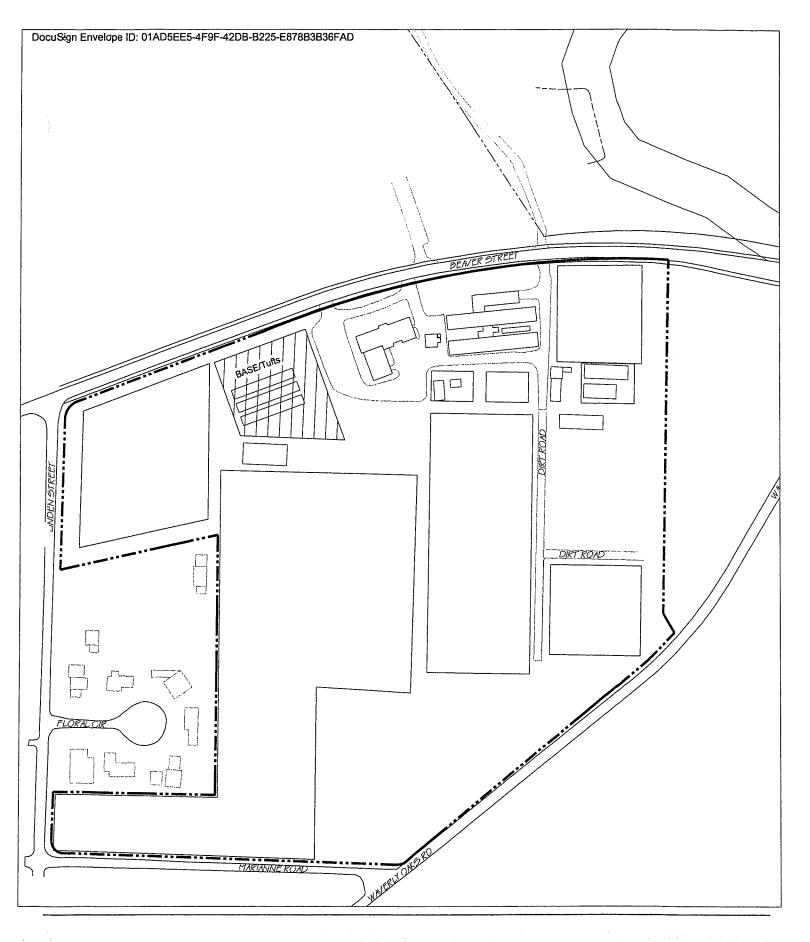
UNIVERSITY OF MASSACHUSETTS. **AMHERST** 

Robert Chihade Director of Real Estate. Tufts University

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> Andrew P. Mangels Vice Chancellor for Administration & Finance

# EXHIBIT A MAP OF LICENSED PREMISES



Licensed Land

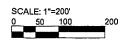


EXHIBIT A

B.A.S.E. / TUFTS LICENSED LAND

6/25/2020



UMass Campus Planning

#### SECOND EXTENSION OF LICENSE AGREEMENT

This Second Extension of License Agreement ("Second Extension") is made on December 15, 2020 by and between the University of Massachusetts Amherst ("University") and Boston Area Gleaners ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. TERM: The term of the Agreement shall be extended on a month-to-month basis, terminable by Licensor or Licensee upon thirty (30) days' prior written notice to the other party.
- 2. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of Eight Hundred Thirty-three Dollars and Thirty-three cents (\$833.33) per month.
- 3. Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Second Extension as of the date first written above.

#### **UNIVERSITY:**

UNIVERSITY OF MASSACHSETTS

By: \_\_\_\_\_lndrw f. Mangels
Name: Andrew P. Mangels

Title: Vice Chancellor for Administration and Finance

LICENSEE:

**BOSTON AREA GLEANERS** 

Name: Usha Thakrar

Title: Executive Director

## FIRST EXTENSION OF LICENSE AGREEMENT

This First Extension of License Agreement ("First Extension") is made on May 15, 2020 by and between the University of Massachusetts Amherst ("University") and Boston Area Gleaners ("Licensee").

WHEREAS, University and Licensee entered into an Agreement for Use of Office Facilities at the UMass Waltham Center dated July 31, 2018, for the Premises at 240 Beaver Street in Waltham, Massachusetts ("Agreement").

WHEREAS, Sections 5 and 22 of the Agreement provide that the parties may mutually agree to modifications to the Agreement in writing.

WHEREAS, University and Licensee wish to modify the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, University and Licensee agree as follows:

- 1. Section 1 (Reference Data) of the Agreement shall be modified as follows:
  - a. Delete the Mailing Address of the University currently listed and replace same with: "Steven Goodwin, Whitmore Administration Building Room 347, 181 Presidents Drive, Amherst, MA 01003".
  - Delete the Premises, Permitted Use, and Consideration text following the Mailing Address.
- 2. Delete the text of Section 2 (Location of the Premises) and replace same with:

#### "2. PREMISES:

Use of six (6) offices, numbering 201, 203, 211, 212, 213, and 214, all located on the second floor of the main building at 240 Beaver Street, Waltham, MA. In addition, non-exclusive use of the auditorium for long term dry storage. Use of land as shown in Exhibit A to park the Licensee's trucks overnight on the premises."

- 3. TERM: The term of the Agreement shall be extended through December 31, 2020.
- 4. FEE: In consideration of the rights granted to Licensee under the Agreement and this Extension, Licensee shall pay to University a fee in the amount of Ten Thousand and 00/100 Dollars (\$10,000.00), payable in advance in monthly installments of Eight Hundred Thirty-three Dollars and Thirty-three cents (\$833.33) per month.
- 5. Section 12 (Surrender of Premises) is hereby amended by deleting the following language in its entirety: "However, if the expiration or termination takes place after the onset of the

Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises."

- 6. Section 12 (Hazardous Materials) is hereby amended to replace "Robert Schrader" with "the University's Environmental Health & Safety Office".
- 7. Section 15 (Insurance) is hereby amended to add the following to the end of the section: "All certificates of insurance from Licensee shall list the University as an additional insured."
- 8. Section 22 (Miscellaneous Provisions) is hereby amended by placing an "X" next to Exhibit A to indicate inclusion of same. Exhibit A showing land licensed is hereby attached and incorporated herein by reference.
- Except as modified hereby, all other parts of the Agreement are ratified, confirmed and approved and shall remain in full force and effect in accordance with its terms.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above.

#### UNIVERSITY:

UNIVERSITY OF MASSACHSETTS

bootsigned by

Name: Andrew P. Mangels

Title: Vice Chancellor for Administration and Finance

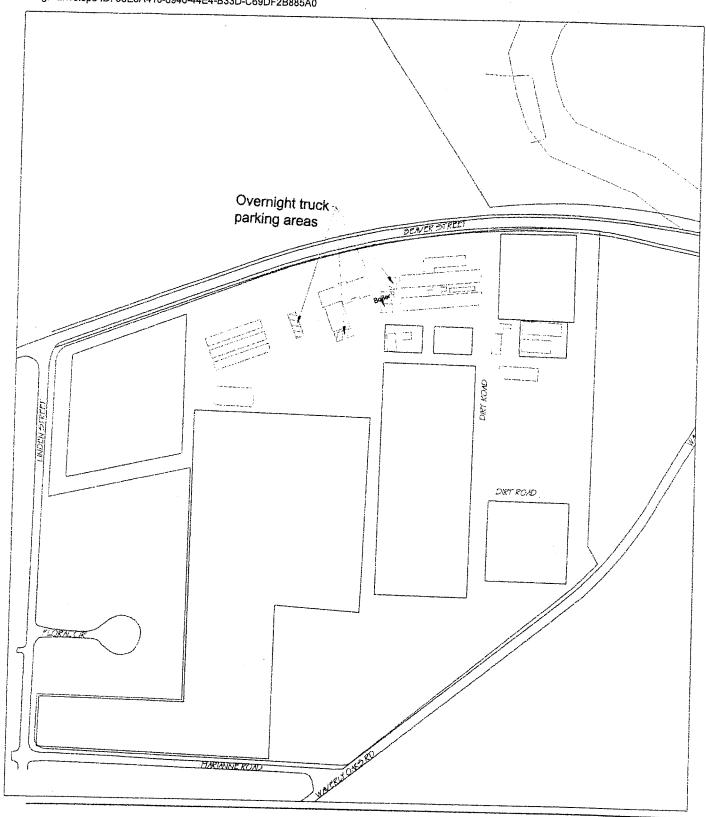
LICENSEE:

By:

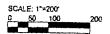
**BOSTON AREA GLEANERS** 

Name: Usha Thakrar

Title: Executive Director







## WALTHAM STATION

BOSTOM AREA GLEANERS
EXHIBIT A - LICENSED LAND
5/14/2020



UMass Campus Planning

# Agreement and Conditions for Use of Office Facilities at the UMass Waltham Center

This Agreement provides conditions for use of office space at the UMass Lastern. Massachusetts Outreach Center. This agreement is between <u>Boston Area Gleaners there are a licensee</u>), a <u>non-profit corporation</u>, and the University of Massachusetts thereinafter referred as the University).

WHEREAS, the University is the owner of certain real property located at 240 Beaver. Street in Waltham and further described in Section 2 of this Agreement; and

WHERFAS, the University is responsible for the care, control and maintenance of said real property; and

WHEREAS, Licensee desires to enter upon said real property for the purposes described in this Agreement;

NOW, THEREFORE, the University hereby grants such entry and use subject to the following terms and conditions:

#### 1. REFERENCE DATA:

Date of Agreement: July 31, 2018

Mailing Address of University:

Evan Pacosa 318D Stockbridge Hall University of Massachusetts Amherst, MA 01003

Mailing Address of Licensee.

Boston Area Gleaners 240 Beaver Street Waltham, MA 02452

Premises: Use of four offices. These rooms, number 201, 202, 211, & 212, are located on the 2<sup>rd</sup> floor of the main building at 240 Beaver Street, Waltham, MA

Permitted Use: The office will be used for administrative functions related to the mission of the organization.

Consideration to be Paid by Licensee, \$15,000.00 for office



uMetas Errension Mass, Water Resources Research Center Mass Agricultural Experiment Station UMass Research and Education Farms

Office of the Director - Stockbridge Holt - 80 Compus Center Way - Arnherst, MA 01003 9246 - p. 413 545 4800 - f. 413 545,6555 - agumass edu

August 20, 2018

Ms. Laurie Caldwell **Executive Director** Boston Area Gleaners 240 Beaver Street Waltham, MA 02452

Dear Laurie,

Enclosed please find a License agreement for land and offices at Waltham for the period July 1, 2018, -December 31, 2019. The license fee is \$15,000.

Please note that there is a copy of Exhibit B attached to this agreement. Please note that the only substantive change to this document from the past is the addition, in the fourth rule listed, of the sentence: "All persons having regular access to the building must be over the age of 18."

Please sign and return one copy of the license agreement to me along with a copy of insurance certificates for liability and workman's compensation (if applicable). Sending by signed PDF is OK. The invoice for the office space at Waltham will be sent by the Business Office semiannually. Payment should be sent directly to my attention. Please also send a copy of your insurance binder naming UMass as an insured.

Please let me know if you have any questions regarding the license or invoice information.

Sincerely,

1000 100

Evan Pacosa College of Natural Sciences **Business Office** 



#### 2. LOCATION OF THE PREMISES

Entry and use are limited to the premises located at rooms 201, 202, 211, & 212.

#### PURPOSE AND USE

The rights of Licensee under this agreement shall be exercised solely for the following purposes: The office will be used for administrative functions related to the mission of the organization.

Specific rules governing access to and use of these facilities are attached as **Exhibit B** and are binding upon both parties.

#### 4. CONDITION OF PREMISES

Licensee acknowledges and agrees that it accepts the Premises in "as is" condition, that Licensor is under no obligation to make any repairs, renovations, or alterations to the Premises, and that the University has made no representations or warranties regarding the fitness of the Premises for Licensee's intended purpose or use.

#### 5. TERM

Term of Agreement: July 1, 2018 to December 31, 2019 unless otherwise terminated earlier in accordance with the terms of this Agreement.

The term of this Agreement may be extended on the following terms, subject to the prior written approval of the University: This Agreement will be reviewed annually on the anniversary date or date mutually agreeable to both parties.

This Agreement is revocable at any time upon thirty (30) days' written notice from either party to the other.

#### 6. HOURS OF OPERATION

During the term of this Agreement, Licensee shall be permitted to operate and use the Premises for the purposes set forth in Section 3 and described in **Exhibit B**.

#### 7. FEE

In consideration of the rights granted to Licensee under this agreement, Licensee shall pay the following Fee:

\$10,000.00

#### 8. PERMITS

This agreement and all obligations hereunder are specifically dependent upon the

issuance to the Licensee of all permits and licenses required to operate and use the Premises for the purposes described in this Agreement from those governmental agencies having jurisdiction. It shall be the responsibility of Licensee to obtain any such permits or licenses, at Licensee's sole cost and expense. In the event Licensee is refused any such permit or license, this agreement shall be null and void with no further obligation by either party to perform. If any such permit or license is revoked or canceled during the term of this Agreement, it shall be cause for terminating this Agreement immediately as set forth in Section 18(c) hereof.

#### 9. ALTERATION OF THE PREMISES

Licensee shall make no alterations or improvements upon the Premises except as may be specifically permitted in a separate Schedule attached to this License as Exhibit C. If no such Schedule is attached, Licensee shall not make any alterations or improvements upon the Premises after this Agreement has commenced unless Licensee has obtained the University's prior written approval, which may be withheld for any reason or for no reason in the University's sole discretion. Any alterations or improvements made by Licensee shall be made in accordance with the terms and conditions established by the University, which may include prior approval of plans, insurance coverage, and a requirement that Licensee remove any or all of its alterations or improvements upon the expiration or earlier termination of this Agreement. All such alterations or improvements remaining upon the Premises after the expiration or this License shall be subject to the provisions of Section 12 hereof. In any event, this Agreement does not for any purpose constitute the granting of an interest in real property and Licensee shall not have any right to make any permanent improvements to, or to install any permanent fixtures on, the Premises.

#### 10. LICENSEE'S EQUIPMENT

Licensee may bring such vehicles and other equipment upon the premises as should ordinarily be used to operate and use the Premises for the purposes permitted by this Agreement, subject, however, to the following limitations outlined in **Exhibit B**.

#### 11. UTILITIES

The University shall provide janitorial services for common areas of the buildings and general maintenance of the buildings and grounds. Heat, electric, water and sewer utilities are provided for the facilities as needed.

The University makes no representation as to the adequacy of utility systems for purposes of Licensee and shall not be responsible for any interruption in utility service.

#### 12. CONDUCT OF LICENSEE

#### Non-interference with University Operations

Licensee shall at all times conduct itself so as not to interfere in any way with the operation of the University facility. Licensee agrees to observe and obey all directives given by

duly designated personnel of the University.

#### Compliance with Laws

Licensee shall at all times operate within the premises in accordance with all applicable laws, statutes, ordinances, regulations, permits, licenses, and requirements of its insurance policies.

#### Repair of Damage

Licensee shall neither cause nor suffer any waste of the premises and shall maintain the premises in good order at all times. The Licensee's responsibilities shall include, but not be limited to, the repair of any and all damage or breakage resulting from acts of vandalism or the intentional or negligent acts of the Licensee or others, but excluding damage or breakage caused by employees, agents or invites of the University. All repairs made by Licensee shall be performed in a manner satisfactory to the University.

#### Sanitation

Licensee shall maintain the Premises in a sanitary condition and shall follow all directions of the University with regard to the collection and disposal of refuse as provided in **Exhibit B**.

#### Security

Licensee shall be responsible for providing, at its sole cost and expense, such security protection or services as may be reasonably necessary to protect the premises and Licensee's invitees from injury or damage.

#### Cost of Operations

Except as otherwise expressly set forth in this Agreement. Licensee shall be responsible for any and all costs and expenses associated with the exercise of its rights under this Agreement and its operations upon the Premises.

#### Operations Limited to Permitted Uses

Licensee shall not conduct, nor permit any of its employees, agents or invitees to conduct, any operations or business upon the Premises except for that permitted by Section 3 of this Agreement.

#### Hazardous Materials

Without limiting any of Licensee's obligations under this or any other Section of this Agreement, Licensee agrees that it shall not cause any hazardous materials to be used, generated, stored or disposed of on, under or about, or transported to or from the premises. For the purposes of this Agreement, "hazardous materials" shall include, but not be limited to substances defined as "hazardous substances", "toxic substances", "hazardous wastes", "hazardous materials", or "oil" in any federal or state statute concerning hazardous materials now or hereafter enacted, including all regulations adopted or publications promulgated thereunder.

Licensee's involved in research and plant propagation may use licensed pesticides, subject to all regulations. Plans for use and storage must be approved annually by Robert

Schrader.

#### Alcoholic Beverages

Unless specifically permitted by the terms of this Agreement, Licensee shall not serve alcoholic beverages upon the Premises, nor allow any of its employees, agents, contractors or invitees to bring or consume alcoholic beverages upon the Premises.

#### Surrender of Premises

Upon the expiration or earlier termination of this Agreement, Licensee shall immediately vacate and surrender the Premises to the University. However, if the expiration or termination takes place after the onset of the Licensee's farming season (January 1st) and is for anything other than a catastrophic event rendering the land unusable or due to misuse on the part of the Licensee, the Licensee shall be allowed to see their full growing season through to completion (Jan through December) before being required to vacate the Premises. Licensee shall also remove all of its property from the Premises and restore the Premises to the condition the Premises were in at the commencement of this Agreement, reasonable wear and tear excepted, and subject further to any obligation Licensee may have hereunder to make repairs or improvements to the Premises. Upon agreement of the parties, Licensee may abandon all or part of its property in place. In the event any of Licensee's personal property remains on the Premises after the expiration or earlier termination of this Agreement without a written agreement between the parties, said property shall be deemed abandoned and may be retained by University without any compensation to Licensee, or may be removed and either stored or disposed of by the University at the sole cost and expense of Licensee.

#### 13. <u>INDEMNIFICATION</u>

Not Applicable

#### RISK OF LOSS

Licensee agrees that it shall use and occupy the Premises at its own risk, and the University shall not be liable to Licensee for any loss or damage to vehicles, equipment, fixtures, or other personal property of the Licensee that are brought upon the Premises. Without limiting the foregoing, the University shall have no liability to Licensee for any injury, loss or damage caused by any act of Licensee's invitees or members of the general public.

#### 15. INSURANCE

The Licensee shall keep in force, at its sole cost and expense, during the full term of this License, and during such other times as Licensee occupies the Premises or any part thereof, the following insurance policies:

- A. Comprehensive public liability insurance in an amount as required by Massachusetts law.
- B. Vehicle Liability Insurance covering each vehicle of Licensee entering the Premises in an amount as required by Massachusetts law.

4 Workers Compensation Insurance covering Licensee's employees upon the Premises in 80.5 actions as are required by law.

D. Such other types of insurance and in such amounts as the University may, from time to time, require in its reasonable judgment.

One or more certificates of insurance showing insurance coverage as required by this Section 15 are attached to this license as **Exhibit D**.

The insurance coverage required by this Section shall be by standard policies, obtained from financially sound and responsible insurance companies authorized to do business in Massachusetts. In the event Licensee fails to obtain any of the insurance coverage required by this section, or if any of the required insurance policies are canceled, it shall be grounds for immediate termination of this Agreement as provided in Section 18(c) of this agreement.

#### 16. ASSIGNMENT

The Licensee shall not sell, assign, sublet, mortgage or transfer any interest in this Agreement or any part of the Premises without obtaining, in each instance, the prior written consent of the University, which consent may be withheld for any reason or for no reason, or granted upon such conditions as the University shall determine, all in its sole discretion.

#### 17. RIGHTS OF UNIVERSITY AND AGENCY TO ENTER

The University reserves the right and the Licensee shall permit the University or its employees or agents to enter upon the Premises at any time to make repairs, perform maintenance, inspect the Premises, show the Premises to others, monitor compliance with this Agreement, or for any other reason.

#### 18. <u>TERMINATION</u>

This Agreement shall expire on the date specified in Section 5, unless extended in compliance with the terms of this Agreement and all other requirements of law, or unless terminated earlier under the following conditions:

- A. <u>Without Cause.</u> Either Licensee or the University may terminate this Agreement by giving written notice to the other party at least thirty (30) calendar days prior to the effective date of termination stated in the notice.
- B. <u>For Cause.</u> If, in the opinion of University, Licensee fails to fulfill its obligations, The University may terminate this Agreement by giving written notice to the Licensee at least five (5) calendar days before the effective date of termination stated in the notice. The notice shall specify in reasonable detail the nature of Licensee's breach. The notice may also state a period during which the breach may be cured by Licensee, provided that such period shall expire on or before the termination date stated in the notice. In the event the Licensee is given an opportunity to cure its breach (which shall be within the sole discretion of the University) and Licensee fails

to complete such cure to the satisfaction of the University within the cure period, this Agreement shall come to an end on the termination date stated in the notice.

C. <u>Emergency</u>. In the event the University determines that it is necessary to terminate this Agreement or suspend Licensee's rights hereunder immediately in order to prevent injury or damage to persons or property, including the interest of the University in the Premises, the University may terminate this Agreement or suspend Licensee's rights hereunder by providing written notice to Licensee stating the grounds for said termination or suspension. Said notice may be given in the form of a telegram, mailgram, hand-carried letter, or other reasonable written means, and this License shall be terminated or suspended, as the case may be, upon delivery of said notice to Licensee.

In the event this Agreement is terminated in accordance with any of the provisions of this Section 18, this Agreement shall come to an end as fully and completely as if the term had expired on the date set forth in Section 5, and Licensee shall vacate and surrender the Premises as provided in Section 12.

In the event this Agreement is terminated by the University in accordance with any of the provisions of this Section 18. Licensee shall not be relieved of liability to the University for arrears in the License fees or for any other injury or damage sustained by the University as a result of a breach of Licensee of any of the terms or conditions of this Agreement, whether occurring before or after such termination. Licensee expressly waives any right to damages related to such termination, including incidental or consequential damages. If this Agreement is terminated for any reason that is not the fault of Licensee, then the fee which the Licensee has covenanted to pay, if any, shall be commensurately reduced by the University on a pro rata per diem basis, and Licensee shall receive a refund of any portion of the Agreement Fee that has been prepaid for a period during which the Licensee was denied use and occupancy of the Premises.

#### NO ESTATE CREATED

This Agreement shall not be construed as creating or vesting in Licensee any estate in the Premises, but only the limited right of possession as herein described, and Licensee shall have no right to require specific performance of the obligation of the University hereunder.

#### 20. NON-DISCRIMINATION

Licensee shall not discriminate against any qualified employee, applicant for employment, subcontractor, or person or firm seeking to provide goods or services to Licensee, nor shall Licensee deny any person access to the Premises or to any activities or programs carried out pursuant to this Agreement because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. The Licensee shall comply with all applicable federal and state statutes, rules, and regulations prohibiting discrimination in employment.

#### 21. NOTICE

All notices or other communications required or permitted to be given under this Agreement shall, unless otherwise expressly permitted hereunder, be in writing signed by a duly authorized representative of the party giving the notice and shall be given by hand delivery (including, without limitation, courier, Federal Express, or other overnight delivery service) or mailed by United States certified mail, postage prepaid, return receipt requested. Such notices shall be sent or addressed to the University and Licensee at the addresses set forth in Section 1.

#### 22. <u>MISCELLANEOUS PROVISIONS</u>

This Agreement may not be modified except in writing, duly executed by both parties.

This Agreement contains the entire agreement of the parties and there are no other agreements or understandings between the parties regarding the subject matter of this Agreement.

The University, its employees, officers or agents, are not authorized to bind or involve the Licensee or the Commonwealth of Massachusetts in any contract or to incur any liability for or on the part of the Licensee or the Commonwealth of Massachusetts.

If any portion of this Agreement is declared to be illegal, unenforceable or void, then all parties to this Agreement shall be relieved of all obligations under that portion; provided, however, that the remainder of this agreement shall be enforced to the fullest extent permitted by law.

No consent or waiver, whether express or implied, by the University to or of any breach of the terms of this Agreement by Licensee shall be construed as a consent or waiver to or of any other breach. No waiver of any breach or default or other indulgence shall be effective unless expressed in writing by the University.

The captions in this Agreement are inserted for convenience of reference only and in no way define, describe or limit the scope or intent of this Agreement or any of the provisions hereof.

No official, employee or consultant of the Commonwealth of Massachusetts (including any Trustee of the University of Massachusetts) shall be personally liable to Licensee or to any person claiming under or through Licensee for or on account of any alleged breach of this Agreement, or for any act, failure to act or other matter arising out of the execution of this Agreement or the performance of Licensee's obligations hereunder.

This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Massachusetts, and any and all legal actions brought in connection with this Agreement shall be brought in courts within the Commonwealth of Massachusetts.

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver is in writing and is signed by the party to be charged.

This Agreement is to take effect as a sealed instrument.

The following exhibits and attachments are made a part of this Agreement for all purposes:

Exhibit A - Plan or Diagram of Premises to be Utilized by Licensee

X Exhibit B - Specific Rules Governing Access and Use of Facility

Exhibit C - Schedule of Permitted Alterations and Improvements

X Exhibit D - Insurance Certificate(s)

#### AGREED AND ACCEPTED

UNIVERSITY OF MASSACHUSETTS:

LICENSEE:

Signature

Joe Shoenfeld, Associate Director Center for Agriculture, Food and the Environment

University of Massachusetts

University of w

Dath

Authorized Signature

Laurie Caldwell, Executive Director Boston Area Gleaners

9/5/18

Exhibit B Use of Grounds and Land at UMass Waltham, 240 Beaver Street, Waltham, Mass.

### Specific Rules Governing Access To and Use of Facility

The following rules apply to use of the facility. All communications related to compliance with use rules and requests for permitted variances should be directed to Facility Manager (Tony Mazzeo) at the facility.

#### General Rules:

Civility and Adherence to Rules: Licensees are responsible for actions of their staff, guests and general public invited onto premises. Licensee is responsible for ensuring compliance with all facility rules.

**Hours of Operation:** Facility is open to licensees and their guests. The building is accessible from 6 AM-11 PM. Outside grounds are accessible from 6 AM till dark.

Parking: Parking is generally available in lots surrounding the building. No parking is allowed on the grass without prior approval. No vehicles are to be left overnight without prior approval.

Persons Authorized to Have Access to Facility: Each licensee is to provide to the Facility Manager a list of persons who will have regular access to the facility. All persons having regular access to the building must be over the age of 18. For persons utilizing space within the buildings this list will specifically identify those who are to receive building keys.

Special Events: Special events, such as plant sales, shows, educational programs and community events, which will use additional areas of the facility are permitted, subject to the approval of the University. Use of the facility can be scheduled through the Facility Manager. Additional fees may be charged to cover related costs to the University, such as staff time, rubbish removal, etc.

### Operational Rules for Organizations Using the Grounds and Land

Facility Access: The grounds are open to licensees from 6 AM - dark. Cars are to be driven onto grass areas only to load and unload materials or for handicapped access. Parking areas for handicapped access will be identified in advance.

**Staff Services**: University staff are responsible for operation and maintenance of the facility. University staff do not provide plant production or administrative services. Each organization must provide their own labor and related services.

Rubbish and Organic Materials Removal: Licensee is responsible for removing rubbish and recyclable materials to dumpsters and/or receptacles for recycling. Plant waste and related organic materials are to be discarded in areas identified by the facility manager.

Site Maintenance & Appearance: Assigned area must appear neat, clean, and orderly throughout the year. Refuse cannot be left at the site. End of the season clean-up is required. Details for clean-up and closing of land operations will be provided.

Water and Utilities: Water is generally provided to each site. Water conservation must be practiced. Water leaks are to be reported to the Facility Manager. All groups using more than an acre of land and the community garden group (GROW) will provide their own water meter in order to monitor use. The University will limit water use as deemed necessary.

Alterations and Changes in Use of the Land: The land can only be used for the purpose stated in the application form and Agreement. Any changes in use or changes to the land or landscape must be requested in writing to the Facility Manager. This includes pruning any surrounding trees or shrubs and adding structures, fencing, trellises or related items.

**Signage:** Small descriptive signs are to be posted at the site, identifying the organization, use of the land (purpose) and contact person for further information.

Contacts and Communications: All issues related to building and facility use should be brought to the attention of the Facility Manager, Tony Mazzeo.

Joe Shoenfeld
Associate Director, UMass Center for Agriculture, Food and the Environment
July, 2018

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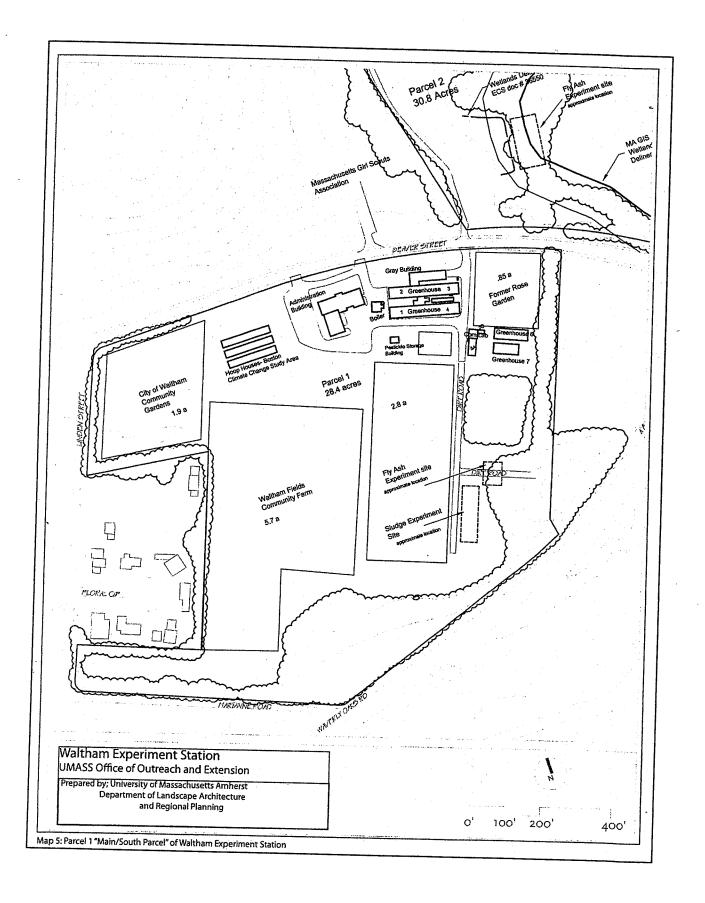
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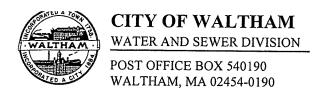
## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 9/10/2018 THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER. IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s). PRODUCER A & B INSURANCE GROUP LLC PHONE (AC, No. Ext): (978) 399-0025 E-MAIL ADDRESS: Wendy@abinsgroup.com 235 Littleton Road, Unit 3 FAX (A/C, No); (978) 399-0079 Westford, MA 01886 INSURER(S) AFFORDING COVERAGE INSURER A: Nautilus INSURED Boston Area Gleaners, Inc INSURER B. Commerce Ins Co 240 Beaver Street INSURER C: Waltham, MA 02452 INSURER D: INSURER E : INSURER F : COVERAGES CERTIFICATE NUMBER: THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, REVISION NUMBER: EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. ADDL SUBR TYPE OF INSURANCE POLICY NUMBER X COMMERCIAL GENERAL LIABILITY EACH OCCURRENCE s 1,000,000 CLAIMS-MADE X OCCUR DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) 12/14/17 12/14/18 NN390628 5,000 A PERSONAL & ADV INJURY 100,000 GEN'L AGGREGATE LIMIT APPLIES PER: GENERAL AGGREGATE \$ 2,000,000 X POLICY PRO-PRODUCTS - COMPIOP AGG | \$ 2,000,000 OTHER. AUTOMOBILE LIABILITY COMBINED SINGLE LIMIT (Ea accident) 500,000 BODILY INJURY (Per person) ALL OWNED AUTOS SCHEDULED AUTOS NON-OWNED AUTOS BCSD43 \$ 12/1/1712/1/18 В BODILY INJURY (Per accident) X HIRED AUTOS X PROPERTY DAMAGE (Per accident) 5 UMBRELLA LIAB OCCUR EACH OCCURRENCE EXCESS LIAB CLAIMS-MADE AGGREGATE s מפס RETENTIONS WORKERS COMPENSATION s AND EMPLOYERS' LIABILITY STATUTE Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandalory in NH) E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYE If yes, describe under DESCRIPTION OF OPERATIONS below E.L. DISEASE - POLICY LIMIT \$ Hired Physical 1000 comp ded B Damage BCSD43 12/1/1712/1/18 1000 coll ded DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) CERTIFICATE HOLDER CANCELLATION UMass Amherst SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. The Center for Agriculture, Food, and Enviroment Stockbridge Hall 80 Campus Center Way AUTHORIZED REPRESENTATIVE Amherst MA 01003





# TREASURER DEPARTMENT INFORMATION REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET



**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACGOUNT NO.	BILLING DATE .
1008001	11/4/2022
DUE D	ATE
12/09/	/22
SERVICE A	DDRESS
240 BEA\	/ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

ON OR 12/09/22 \$102.38 **BEFORE** 

TRANSACTION THIS PERIOD	AMÖUNT
PREVIOUS BALANCE	\$102.38
PAYMENTS THROUGH 11/04/2022	-\$102.38
ADJUSTMENTS THROUGH 11/04/2022	\$0.00
INTEREST AS OF: 12/09/2022	0.00
BALANCE FORWARD	\$0.00

#### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date			Usage	#Days
	Curr				
2553189	8,118	Manual estir	10/25/2022	0	91
	Reading	History			
2553189	8,118		10/25/2022	0	91
2553189	8,118	Estimate	07/26/2022		88
2553189	8,118	Actual	04/29/2022	0	112
2553189	8,118	Final Bill	01/07/2022	0	67
2553189	8,118	Actual	11/01/2021	4	95

		1
Current Bill Detail	Usage/Unit	AMOUNT
Meter Rental - Eastern		\$20.00
Water Usage (2 - Eastern)		\$66.00
Sewer Usage (2 - Eastern)	<del></del>	\$16.38
	Sub-Total	\$102.38
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# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Inform (781)314-3

PLEASE RETURN THIS PORTION

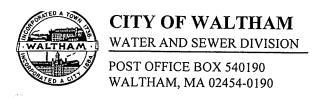
SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1008001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

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OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
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240 BEA	VER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$252.38
PAYMENTS THROUGH 08/10/2022	-\$252.38
ADJUSTMENTS THROUGH 08/10/2022	\$0.00
INTEREST AS OF: 09/12/2022	0.00
BALANCE FORWARD	\$0.00

#### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading	& Date	Usage	#Days
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Current Bill Detail Meter Rental - Eastern	<u>Usage/Unit</u>	
Water Usage (2 - Eastern)		\$20.00
Sewer Usage (2 - Eastern)		\$66.00
Sewer Osage (2 - Eastern)		\$16.38
	Sub-Total	\$102.38
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Paul	9/2/2	52



# CITY OF WALTHAM WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1008001

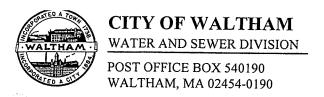
FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

ON OR BEFORE 09/12/22 \$102.38

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**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO:	BILLING DATE
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240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

SEA ON OR 06/10/22 \$252.38	AY B	ON OR EFORE	06/10/22		\$252.38
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#### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE** Serial No Reading & Date #Days Usage Current 2553189 8,118 Actual 04/29/2022 0 112 Reading History 2553189 8,118 Actual 04/29/2022 0 112 2553189 8,118 Final Bill 01/07/2022 0 67 2553189 8,118 Actual 11/01/2021 4 95 2553189 8.114 Actual 07/29/2021 0 90 2553189 8,114 Actual 04/30/2021 85

Current Bill Detail Meter Rental - Eastern	Usage/Unit	<u>AMOUNT</u> \$20.00
Misc Cross Connect Fee - Eastern Water Usage (2 - Eastern) Sewer Usage (2 - Eastern)	2	\$150.00 \$66.00 \$16.38
	Sub-Total	\$252.38
•	Total	\$252.38



#### **CITY OF WALTHAM** WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 **Billing Information** (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

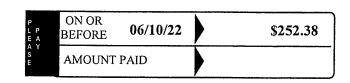
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

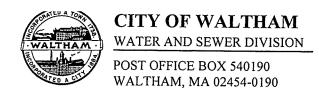
240 BEAVER ST	1008001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724 

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452





**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	1/10/2022
DUE DA	ATE
02/09/2	22
SERVICE AL	DDRESS :
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS

ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

P L P E A A Y S E	ON OR BEFORE	02/09/22	\$102.38

## **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Rea	ading & Date		Usage	#Days
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	Reading	History			
2553189	8,118	Final Bill	01/07/2022	0	67
2553189	8,118	Actual	11/01/2021	4	95
2553189	8,114	Actual	07/29/2021	0	90
2553189	8,114	Actual	04/30/2021	0	85
2553189	8,114	Manual estimate	02/04/2021	0	98
2553189	8,114	Actual	10/29/2020	0	87

TRANSACTION THIS I	PERIÓD	AMOUNT
PREVIOUS BALANCE		\$182.84
PAYMENTS THROUGH 01/2		-\$182.84
ADJUSTMENTS THROUGH	01/10/2022	\$0.00
INTEREST AS OF: 02/09/202	2	0.00
BALANCE FORWARD		\$0.00
Current Bill Detail	<u>Usage/Unit</u>	AMOUNT

Meter Rental - East	ern		\$20.00
Water Usage (2 - E	astern)		\$66.00
Sewer Usage (2 - E	astern)		\$16.38
		Sub-Total	\$102.38
		Total	\$102.38
`			
Pard	3/8	3/22	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

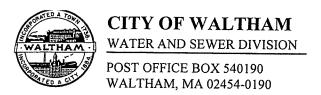
240 BEAVER ST	1008001	
SERVICE ADDRESS (5)	ACCOUNT NUMBER	

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269 360 CAMPUS CENTER WAY AMHERST MA 01003

ON OR 02/09/22 \$102.38 BEFORE AMOUNT PAID



**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	11/4/2021
DUE DA	TE :
12/06/2	.1
SERVICE AE	DDRESS
240 BEAVE	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269 TRANSACTION THIS PERIOD

360 CAMPUS CENTER WAY AMHERST MA 01003

P LP EAY S E	ON OR BEFORE	12/06/21	\$182.84

## **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

					_
Serial No	Re	ading & Date		Usage	#Days
	Cur				
2553189	8,118	3 Actual	11/01/2021	4	95
	Reading	History			
2553189	8,118	Actual	11/01/2021	4	95
2553189	8,114	Actual	07/29/2021	Ó	90
2553189	8,114	Actual	04/30/2021	0	85
2553189	8,114	Manual estimate	02/04/2021	0	98
2553189	8,114	Actual	10/29/2020	0	87
*					

ADJUSTMENTS THROUGH 11/	\$0.00	
INTEREST AS OF: 12/06/2021	0.00	
BALANCE FORWARD		\$0.00
C. APH D. C.	**	
Current Bill Detail	<u>Usage/Unit</u>	<u>AMOUNT</u>
Meter Rental - Eastern		\$20.00
Misc Cross Connect Fee - Eastern		\$75.00
Water Usage (2 - Eastern)	400	\$66.00
Sewer Usage (2 - Eastern)	400	\$21.84

Sub-Total

Total

Paud 16/22



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PREVIOUS BALANCE

PAYMENTS THROUGH 11/03/2021

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

AMOUNT

\$252.38

-\$252.38

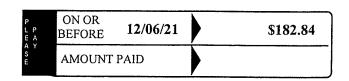
\$182.84

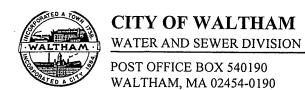
\$182.84

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724





**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	8/10/2021
DUE DA	TE
09/15/2	21
SERVICE AT	DDRESS
240 BEAVI	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS

360 CAMPUS CENTER WAY AMHERST MA 01003

ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

P P E A Y S E	ON OR BEFORE	09/15/21	\$252.38
TRA	NSACTION	THIS PERIOD	AMOUNT

#### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Rea	ading & Date		Usage	#Days
	Curi	rent			
2553189	8,114	Actual	07/29/2021	0	90
	Reading	History			
2553189	8,114	Actual	07/29/2021	0	90
2553189	8,114	Actual	04/30/2021	0	85
2553189	8,114	Manual estimate	02/04/2021	0	98
2553189	8,114	Actual	10/29/2020	0	87
2553189	8,114	Actual	08/03/2020	0	95

ADJUSTMENTS THROUGH 08/10/2021		
INTEREST AS OF: 09/15/2021		
	\$0.00	
<u>Usage/Unit</u>	<u>AMOUNT</u>	
	\$20.00	
2	\$150.00	
	\$66.00	
	\$16.38	
	10/2021  Usage/Unit	

Sub-Total

Total

9/14/21



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 **Billing Information** (781)314-3810

PREVIOUS BALANCE

PAYMENTS THROUGH 08/10/2021

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

\$102.38

-\$102.38

\$252.38

\$252.38

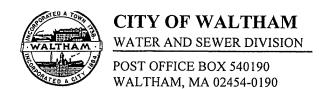
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1008001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724 

ON OR BEFORE	09/15/21	\$252.38
AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	5/10/2021
DUE/D	PATE
06/11	/21
SERVICE A	ADDRESS
240 BEA\	VER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

ON OR BEFORE 06/11/21 \$102.38
--------------------------------

#### TRANSACTION THIS PERIOD AMOUNT PREVIOUS BALANCE \$177.38 PAYMENTS THROUGH 05/10/2021 -\$177.38 ADJUSTMENTS THROUGH 05/10/2021 \$0.00 0.00 INTEREST AS OF: 06/11/2021 **BALANCE FORWARD** \$0.00 **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Rea	iding & Date		Usage	#Days
2553189	Curr 8,114		04/30/2021	0	85
	Reading 1	•			
2553189	8,114	Actual	04/30/2021	0	85
2553189		Manual estimate		0	98
2553189	8,114	Actual	10/29/2020	0	87
2553189	8,114	Actual	08/03/2020	0	95
2553189	8,114	Actual	04/30/2020	1	111

Current Bill Detail Meter Rental - Easte Water Usage (2 - Ea		<u>Usage/Unit</u>	AMOUNT \$20.00 \$66.00
Sewer Usage (2 - Ea		_	\$16.38
		Sub-Total	\$102.38
		Total	\$102.38
Paid	الما	32/21	



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

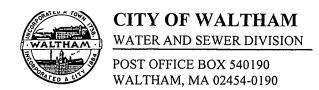
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1008001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724 

ON BEF	OR ORE	06/11/21	<b>)</b>	\$102.38
AMOUNT		PAID		



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE		
1008001	2/12/2021		
DUE DATE			
03/23/	21		
SERVICE A	DDRESS		
240 BEAV	/ER ST		

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS
ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

BEFORE BEFORE	
---------------	--

TRANSACTION THIS PERIOD AMOUNT

# PREVIOUS BALANCE \$102.38 PAYMENTS THROUGH 02/12/2021 -\$102.38 ADJUSTMENTS THROUGH 02/12/2021 \$0.00 INTEREST AS OF: 03/23/2021 0.00 MOVING? PLEASE CALL 781-314-3810 IN ADVANCE BALANCE FORWARD \$0.00

Serial No	Rea	ding & Date		Usage	#Days
	Curr	ent			
2553189	8,114	Manual estii	02/04/2021	0	98
	Reading l	History			
2553189	8,114	Manual estimate	02/04/2021	0	98
2553189	8,114	Actual	10/29/2020	0	87
2553189	8,114	Actual	08/03/2020	0	95
2553189	8,114	Actual	04/30/2020	1	111
2553189	8,113	Actual	01/10/2020	1	80

Current Bill Detail Meter Rental - Eastern Misc Cross Connect Fee - Eastern Water Usage (2 - Eastern) Sewer Usage (2 - Eastern)	<u>Usage/Unit</u>	AMOUNT \$20.00 \$75.00 \$66.00 \$16.38
	Sub-Total	\$177.38
	Total	\$177.38
Paid 3/0	15/12	



## **CITY OF WALTHAM**

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

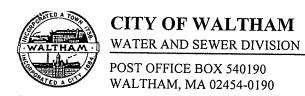
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1008001	I
SERVICE ADDRESS	ACCOUNT NUMBER	F

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724

ON OR BEFORE	03/23/21	\$177.38
AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	12/1/2022
DUE	DATE
12/3	30/22
SERVICE	ADDRESS
240 BE	AVER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

P L P E A A Y S E	ON OR BEFORE	12/30/22	\$500.47

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$474.81
PAYMENTS THROUGH 12/01/2022	-\$474.81
ADJUSTMENTS THROUGH 12/01/2022	\$0.00
BALANCE FORWARD	\$0.00

#### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,761 Actual	11/22/2022	21	28
	Reading History			
1-0-28552	2,761 Actual	11/22/2022	21	28
1-0-28552	2,740 Actual	10/25/2022	20	29
1-0-28552	2,720 Actual	09/26/2022	10	31
1-0-28552	2,710 Actual	08/26/2022	11	32
1-0-28552	2,699 Actual	07/25/2022	9	28
1-0-28552	2,690 Actual	06/27/2022	13	30
0-28552	2,677 Actual	05/28/2022	18	33
ე-28552	2,659 Actual	04/25/2022	23	32
1-0-28552	2,636 Actual	03/24/2022	31	35
1-0-28552	2,605 Actual	02/17/2022	35	28

Current Bill Detail	Usage/Unit	AMOUNT
Monthly Water Usage	2,100	<u>AMOUNT</u> \$94.59
Monthly Sewer Usage	2,100	\$399.21
Monthly Meter Rental		\$6.67
	Sub-Total	\$500.47
	Total	\$500.47

Dew not yet Pd



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

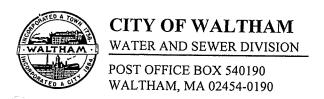
240 BEAVER ST	1010001	I
SERVICE ADDRESS	ACCOUNT NUMBER	F

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766 

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

ON OR BEFORE	12/30/22	\$500.47
AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

		401
ACCOUNT NO.	BILLING DATE	
1010001	11/1/2022	
DÜE DA	VTE	
11/30/2	22	
SERVICE AI	DDRESS	
240 BEAV	ER ST	

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

P L P E A A Y S E	ON OR BEFORE	11/30/22	\$474.81

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE PAYMENTS THROUGH 11/01/2022	\$230.71 -\$230.71
ADJUSTMENTS THROUGH 11/01/2022	\$0.00
BALANCE FORWARD	\$0.00

#### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			·····
1-0-28552	2,740 Actual	10/25/2022	20	29
				1
				·
	Reading History			
1-0-28552	2,740 Actual	10/25/2022	20	29
1-0-28552	2,720 Actual	09/26/2022	10	31
1-0-28552	2,710 Actual	08/26/2022	11	32
1-0-28552	2,699 Actual	07/25/2022	9	28
1-0-28552	2,690 Actual	06/27/2022	13	30
1-0-28552	2,677 Actual	05/28/2022	18	33
-0-28552	2,659 Actual	04/25/2022	23	32
0-28552	2,636 Actual	03/24/2022	31	35
1-0-28552	2,605 Actual	02/17/2022	35	28
1-0-28552	2,570 Actual	01/20/2022	24	14

Current Bill Detail	<u>Usage/Unit</u>	AMOUNT
Monthly Water Usage	2,000	\$87.94
Monthly Sewer Usage	2,000	\$380.20
Monthly Meter Rental	_	\$6.67
	Sub-Total	\$474.81
	Total	\$474.81
Paid	11/18/5	12



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

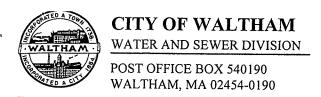
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	LESSACIONALES	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1010001	IN A PROPERTY TAX LIEN

4735766

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

P L P E A	ON OR BEFORE	11/30/22	\$474.81
A Y S E	AMOUNT	PAID	



**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	10/3/2022
DUE.C	DATE
10/31	/22
SERVICE A	ADDRESS
240 BEA	VER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$253.87
PAYMENTS THROUGH 10/03/2022	-\$253.87
ADJUSTMENTS THROUGH 10/03/2022	\$0.00
BALANCE FORWARD	\$0.00

#### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Reading & Date	01-314-3010 IM	Usage	#Days
	Current			
1-0-28552	2,720 Actual	09/26/2022	10	31
	Reading History			
1-0-28552	2,720 Actual	09/26/2022	10	31
1-0-28552	2,710 Actual	08/26/2022	11	32
1-0-28552	2,699 Actual	07/25/2022	9	28
1-0-28552	2,690 Actual	06/27/2022	13	30
1-0-28552	2,677 Actual	05/28/2022	18	33
1-0-28552	2,659 Actual	04/25/2022	23	32
¹-0-28552	2,636 Actual	03/24/2022	31	35
0-28552	2,605 Actual	02/17/2022	35	28
1-0-28552	2,570 Actual	01/20/2022	24	14
1-0-28552	2,546 Final Bill	01/06/2022	16	17

Current Bill Detail	<u>Usage/Unit</u>	<b>AMOUNT</b>
Monthly Water Usage	1,000	\$33.94
Monthly Sewer Usage	1,000	\$190.10
Monthly Meter Rental		\$6.67
	Sub-Total	\$230.71
	Total	\$230.71
Paid	10/28/2	2



# **CITY OF WALTHAM**

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

Current Bill Detail

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

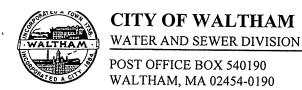
	SERVICE ADDRESS	ACCOUNT NUMBER
Ì	240 DEAVER 51	1010001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766 

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

ON OR 10/31/22 \$230.71 BEFORE AMOUNT PAID



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO:	BILLING DATE
1010001	9/1/2022
DUE D	ATE.
09/30/2	22
SERVICE AI	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$507.74
PAYMENTS THROUGH 09/01/2022	-\$507.74
ADJUSTMENTS THROUGH 09/01/2022	\$0.00
BALANCE FORWARD	\$0.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

IVIOV	ING! PLEASE CALL /	91-214-2810 IIA	ADVANC	=
Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,710 Actual	08/26/2022	11	32
	Reading History			
1-0-28552	2,710 Actual	08/26/2022	11	32
1-0-28552	2,699 Actual	07/25/2022	9	28
1-0-28552	2,690 Actual	06/27/2022	13	30
1-0-28552	2,677 Actual	05/28/2022	18	33
1-0-28552	2,659 Actual	04/25/2022	23	32
1-0-28552	2,636 Actual	03/24/2022	31	35
0-28552	2,605 Actual	02/17/2022	35	28
)-28552	2,570 Actual	01/20/2022	24	14
1-0-28552	2,546 Final Bill	01/06/2022	16	17
1-0-28552	2,530 Actual	12/20/2021	25	28

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 1,100 1,100	AMOUNT \$38.09 \$209.11 \$6.67
	Sub-Total	\$253.87
	Total	\$253.87
Rud 9	123/22	



## **CITY OF WALTHAM**

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

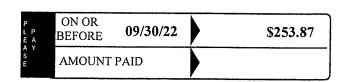
BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

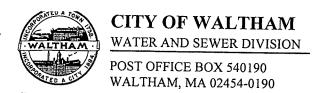
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766





OFFICE HOURS
Mon - Fri.

8:30am to 4:30pm

ACCOUNT NO. BILLING DATE

1010001 8/1/2022

DUE DATE

08/31/22

SERVICE ADDRESS

240 BEAVER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452 ON OR BEFORE 08/31/22 \$507.74

AMOUNT
\$723.68
-\$423.49
\$0.00
\$300.19

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,699 Actual	07/25/2022	9	28
	Reading History			
1-0-28552	2,699 Actual	07/25/2022	9	28
1-0-28552	2,690 Actual	06/27/2022	13	30
1-0-28552	2,677 Actual	05/28/2022	18	33
1-0-28552	2,659 Actual	04/25/2022	23	32
1-0-28552	2,636 Actual	03/24/2022	31	35
1-0-28552	2,605 Actual	02/17/2022	35	28
9-28552	2,570 Actual	01/20/2022	24	14
)-28552	2,546 Final Bill	01/06/2022	16	17
1-0-28552	2,530 Actual	12/20/2021	25	28
1-0-28552	2,505 Actual	11/22/2021	26	33

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 900 900	AMOUNT \$29.79 \$171.09 \$6.67
	Sub-Total	\$207.55
	Total	\$507.74
Raid	8/26/23	2



# CITY OF WALTHAM WATER AND SEWER DIVISION

POST OFFICE BOX 540190

WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

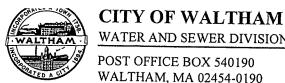
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS 240 BEAVER ST	ACCOUNT NUMBER 1010001	D Iì
	1010001	

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

P L P E A	ON OR BEFORE	08/31/22	\$507.74
Y	AMOUNT	PAID	



# WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	7/1/2022
DUE DA	TE .
07/29/2	22
SERVICE AL	DDRESS
240 BEAVE	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

P ON OR	AY BEFORE	\$723.68
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TRANSACTION THIS PERIOD	ΔΜΟΓΝΊΤ
PREVIOUS BALANCE	\$423.49
PAYMENTS THROUGH 07/01/2022	\$0.00
ADJUSTMENTS THROUGH 07/01/2022	\$0.00
BALANCE FORWARD	\$423.49

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Serial No Reading & Date		Usage	#Days
	Current			
1-0-28552	2,690 Actual	06/27/2022	13	30
	Reading History			
1-0-28552	2,690 Actual	06/27/2022	12	20
1-0-28552	2,677 Actual	05/28/2022	13 18	30
1-0-28552	2,659 Actual	04/25/2022	23	33 32
1-0-28552	2,636 Actual	03/24/2022	23 31	35
1-0-28552	2,605 Actual	02/17/2022	35	28
1-0-28552	2,570 Actual	01/20/2022	24	28 14
¹ -0-28552	2,546 Final Bill	01/06/2022	16	17
-28552	2,530 Actual	12/20/2021	25	28
0-28552	2,505 Actual	11/22/2021	26	33
1-0-28552	2,479 Actual	10/20/2021	15	28

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 1,300 1,300	AMOUNT \$46.39 \$247.13 \$6.67
A Contract of the Contract of	Sub-Total  Total	\$300.19 \$723.68
Paid 8/2	= = 122	



# **CITY OF WALTHAM**

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

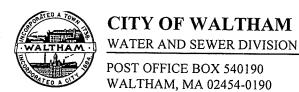
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001	IN
	Burney and the second s	DI
SERVICE ADDRESS	ACCOUNT NUMBER	FA
A REPORT AND A POST OF A SECTION AND A SECTION AND A SECTION AND A SECTION ASSESSMENT AND A SECTION ASSESSMENT		

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT N A PROPERTY TAX LIEN

4735766 

P L P E A	ON OR BEFORE	07/29/22	\$723.68
S E	AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	6/1/2022
DUE DA	ATTE
06/30/2	22
SERVICE AI	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

ON OR 06/30/22 BEFORE 06/30/22
--------------------------------

# TRANSACTION THIS PERIOD AMOUNT PREVIOUS BALANCE \$2,142.91 PAYMENTS THROUGH 06/01/2022 -\$2,142.91 ADJUSTMENTS THROUGH 06/01/2022 \$0.00 BALANCE FORWARD \$0.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,677 Actual	05/28/2022	18	33
	Reading History			
1-0-28552	2,677 Actual	05/28/2022	18	33
1-0-28552	2,659 Actual	04/25/2022	23	32
1-0-28552	2,636 Actual	03/24/2022	31	35
1-0-28552	2,605 Actual	02/17/2022	35	28
1-0-28552	2,570 Actual	01/20/2022	24	14
1-0-28552	2,546 Final Bill	01/06/2022	16	17
9-28552	2,530 Actual	12/20/2021	25	28
)-28552	2,505 Actual	11/22/2021	26	33
1-0-28552	2,479 Actual	10/20/2021	15	28
1-0-28552	2,464 Actual	09/22/2021	4	22

Current Bill Detail	<u>Usage/Unit</u>	AMOUNT
Monthly Water Usage	1,800	\$74.64
Monthly Sewer Usage	1,800	\$342.18
Monthly Meter Rental	-	\$6.67
	Sub-Total	\$423.49
	Total	\$423.49
Paid 7/8	عاع	



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001	11
SERVICE ADDRESS	ACCOUNT NUMBER.	F.

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

P L P E A	ON OR BEFORE	06/30/22	<b>)</b>	\$423.49
A Y S E	AMOUNT	PAID		



POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	5/2/2022
DUE DA	ATE
05/31/2	22
SERVICE AI	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

P L P E A A Y S E	ON OR BEFORE	05/31/22	\$2,142.91
A Y S E	BEFORE	03/31/22	Ψ2,1 12.71

A STATE OF THE PROPERTY OF THE	AMOUNT
PREVIOUS BALANCE	\$1,591.12
PAYMENTS THROUGH 05/02/2022	\$0.00
ADJUSTMENTS THROUGH 05/02/2022	\$0.00
BALANCE FORWARD	\$1,591.12
	ADJUSTMENTS THROUGH 05/02/2022

#### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,659 Actual	04/25/2022	23	32
	Reading History			
1-0-28552	2,659 Actual	04/25/2022	23	32
1-0-28552	2,636 Actual	03/24/2022	31	35
1-0-28552	2,605 Actual	02/17/2022	35	28
1-0-28552	2,570 Actual	01/20/2022	24	14
1-0-28552	2,546 Final Bill	01/06/2022	16	17
1-0-28552	2,530 Actual	12/20/2021	25	28
9-28552	2,505 Actual	11/22/2021	26	33
J-28552	2,479 Actual	10/20/2021	15	28
1-0-28552	2,464 Actual	09/22/2021	4	22
1-0-28552	2,460 Actual	08/31/2021	9	35

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 2,300 2,300	AMOUNT \$107.89 \$437.23 \$6.67
	Sub-Total	\$551.79
	Total	\$2,142.91

Paid 5/20/22



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

١	SERVICE ADDRESS	ACCOUNT NUMBER	F
ļ		ACCOUNT NUMBER	D
١	240 BEAVER ST	1010001	11
		i .	

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

ON OR BEFORE **05/31/22** \$2,142.91

AMOUNT PAID



POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	4/1/2022
DUEDA	ATÉ :
04/29/2	22
SERVICE AL	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$1,809.23
PAYMENTS THROUGH 04/01/2022 ADJUSTMENTS THROUGH 04/01/2022	-\$975.18 \$0.00
BALANCE FORWARD	\$834.05

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,636 Actual	03/24/2022	31	35
	Reading History			
1-0-28552	2,636 Actual	03/24/2022	31	35
1-0-28552	2,605 Actual	02/17/2022	35	28
1-0-28552	2,570 Actual	01/20/2022	24	14
1-0-28552	2,546 Final Bill	01/06/2022	16	17
1-0-28552	2,530 Actual	12/20/2021	25	28
1-0-28552	2,505 Actual	11/22/2021	26	33
9-28552	2,479 Actual	10/20/2021	15	28
)-28552	2,464 Actual	09/22/2021	4	22
1-0-28552	2,460 Actual	08/31/2021	ġ	35
1-0-28552	2,451 Actual	07/27/2021	8	34

Current Bill Detail Monthly Water Usage Monthly Sewer Usage	<u>Usage/Unit</u> 3,100 3,100	AMOUNT \$161.09 \$589.31
Monthly Meter Rental	_	\$6.67
	Sub-Total	\$757.07
	Total	\$1,591.12
Rivel	w/mc	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

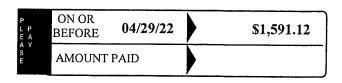
BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS:	ACCOUNT NUMBER	F
240 BEAVER ST	1010001	11

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766





POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	3/1/2022
DUE DA	TE
03/31/2	22
SERVICE AL	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

P L P E A A Y S	ON OR BEFORE	03/31/22	\$1,809.23

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$1,552.63
PAYMENTS THROUGH 03/01/2022	-\$603.11
ADJUSTMENTS THROUGH 03/01/2022	\$0.00
BALANCE FORWARD	\$949.52

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

MOTING: 1 ELASE CALE 701-314-3010 IN ADVANCE				
Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,605 Actual	02/17/2022	35	28
	Reading History			
1-0-28552	2,605 Actual	02/17/2022	35	28
1-0-28552	2,570 Actual	01/20/2022	24	14
1-0-28552	2,546 Final Bill	01/06/2022	16	17
1-0-28552	2,530 Actual	12/20/2021	25	28
1-0-28552	2,505 Actual	11/22/2021	26	33
1-0-28552	2,479 Actual	10/20/2021	15	28
9-28552	2,464 Actual	09/22/2021	4	22
)-28552	2,460 Actual	08/31/2021	9	35
1-0-28552	2,451 Actual	07/27/2021	8	34
1-0-28552	2,443 Actual	06/23/2021	9	34

Current Bill Detail	<u>Usage/Unit</u>	AMOUNT
Monthly Water Usage	3,500	\$187.69
Monthly Sewer Usage	3,500	\$665.35
Monthly Meter Rental		\$6.67
	Sub-Total	\$859.71
	Total	\$1,809.23



# CITY OF WALTHAM WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACCOUNT NUMBER	F/
240 BEAVER ST	1010001	IN

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

ON OR BEFORE 03/31/22 \$1,809.23

AMOUNT PAID



POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNTINO.	BILLING DATE
1010001	2/1/2022
DUE DA	ĀTE
02/28/2	22
SERVICE AI	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

|--|

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$975.18
PAYMENTS THROUGH 02/01/2022	\$0.00
ADJUSTMENTS THROUGH 02/01/2022	\$0.00
BALANCE FORWARD	\$975.18

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
1.0.00550	Current			
1-0-28552	2,570 Actual	01/20/2022	24	14
	Reading History			
1-0-28552	2,570 Actual	01/20/2022	24	14
1-0-28552	2,546 Final Bill	01/06/2022	16	17
1-0-28552	2,530 Actual	12/20/2021	25	28
1-0-28552	2,505 Actual	11/22/2021	26	33
1-0-28552	2,479 Actual	10/20/2021	15	28
1-0-28552	2,464 Actual	09/22/2021	4	22
9-28552	2,460 Actual	08/31/2021	9	35
)-28552	2,451 Actual	07/27/2021	8	34
1-0-28552	2,443 Actual	06/23/2021	9	34
1-0-28552	2,434 Actual	05/20/2021	19	28

Current Bill Detail	<u>Usage/Unit</u>	<u>AMOUNT</u>
Monthly Water Usage	2,400	\$114.54
Monthly Sewer Usage	2,400	\$456.24
Monthly Meter Rental		\$6.67
	Sub-Total	\$577.45
	Total	\$1,552.63
Rid	$\omega/m$	
		$\sim$



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

L	240 BEAVER ST	1010001	
	SERVICE ADDRESS	ACCOUNT NUMBER	

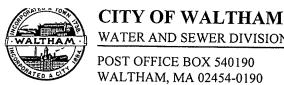
FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

CITY OF WALTHAM C/O BUILDING DEPARTMENT 119 SCHOOL ST. WALTHAM MA 02452

ON OR BEFORE 02/28/22 \$1,552.63

AMOUNT PAID



# WATER AND SEWER DIVISION

POST OFFICE BOX 540190

Billing Information (781)314-3810

**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE	
1010001	1/10/2022	
DUE DATE		
02/09/	/22	
SERVICE ADDRESS		
240 BEA\	/ER ST	

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

BEFORE	P L P E A A Y	ON OR BEFORE	02/09/22		\$975.18
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TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$1,075.78
PAYMENTS THROUGH 01/10/2022 ADJUSTMENTS THROUGH 01/10/2022	-\$472.77 \$0.00
BALANCE FORWARD	\$603.01

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

1010	VING! PLEASE CALL /	91-314-3810 IN	ADVANC	t
Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,546 Final Bill	01/06/2022	16	17
	Reading History			
1-0-28552	2,546 Final Bill	01/06/2022	16	17
1-0-28552	2,530 Actual	12/20/2021	25	28
1-0-28552	2,505 Actual	11/22/2021	26	33
1-0-28552	2,479 Actual	10/20/2021	15	28
1-0-28552	2,464 Actual	09/22/2021	4	22
1-0-28552	2,460 Actual	08/31/2021	9	35
9-28552	2,451 Actual	07/27/2021	8	34
-28552	2,443 Actual	06/23/2021	9	34
1-0-28552	2,434 Actual	05/20/2021	19	28
1-0-28552	2,415 Actual	04/22/2021	29	30

Current Bill Deta	<u>il</u>	Usage/Unit	AMOUNT
Monthly Water U	sage	1,600	\$61.34
Monthly Sewer U	sage	1,600	\$304.16
Monthly Meter R	ental		\$6.67
		Sub-Total	\$372.17
		Total	\$975.18
Rid	3/8/	122	



# **CITY OF WALTHAM**

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766 

ON OR BEFORE	02/09/22	\$975.18
AMOUNT	PAID	



POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNTINO:	BILLING DATE
1010001	1/3/2022
DUE DA	ME.
01/31/2	22
SERVICE AI	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS
ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

P L P E A A Y S	ON OR BEFORE	01/31/22	\$1,075.78

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$963.54
PAYMENTS THROUGH 01/03/2022	-\$490.87
ADJUSTMENTS THROUGH 01/03/2022	\$0.00
BALANCE FORWARD	\$472.67

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,530 Actual	12/20/2021	25	28
	Reading History			
1-0-28552	2,530 Actual	12/20/2021	25	28
1-0-28552	2,505 Actual	11/22/2021	26	33
1-0-28552	2,479 Actual	10/20/2021	15	28
1-0-28552	2,464 Actual	09/22/2021	4	22
1-0-28552	2,460 Actual	08/31/2021	9	35
1-0-28552	2,451 Actual	07/27/2021	8	34
1-0-28552	2,443 Actual	06/23/2021	9	34
-28552	2,434 Actual	05/20/2021	19	28
0-28552	2,415 Actual	04/22/2021	29	30
1-0-28552	2,386 Actual	03/23/2021	40	35

Current Bill Detail	Llagge/Linit	43.607.57
Monthly Water Usage	<u>Usage/Unit</u> 2,500	<u>AMOUNT</u> \$121.19
Monthly Sewer Usage	2,500	\$475.25
Monthly Meter Rental		\$6.67
	Sub-Total	\$603.11
	Total	\$1,075.78
Rud 2/22	127	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

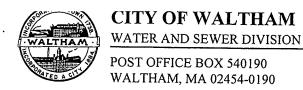
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001
SERVICE ADDRESS	ACGOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

P L P E A	ON OR BEFORE	01/31/22	<b>)</b>	\$1,075.78
S	AMOUNT	PAID		



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	12/1/2021
DUE DA	VTE
12/31/2	21
SERVICE AI	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

P L P E A A Y S E	ON OR BEFORE	12/31/21	\$963.54

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$490.77
PAYMENTS THROUGH 12/01/2021	\$0.00
ADJUSTMENTS THROUGH 12/01/2021	\$0.00
BALANCE FORWARD	\$490.77

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days	Y
1-0-28552	Current 2,505 Actual	11/22/2021	26	33	Current Bill Monthly Wa Monthly Se Monthly Me
	Reading History				
1-0-28552	2,505 Actual	11/22/2021	26	33	
1-0-28552	2,479 Actual	10/20/2021	15	28	'
1-0-28552	2,464 Actual	09/22/2021	4	22	
1-0-28552	2,460 Actual	08/31/2021	9	35	101
1-0-28552	2,451 Actual	07/27/2021	8	34	, 000
1-0-28552	2,443 Actual	06/23/2021	9	34	
1-0-28552	2,434 Actual	05/20/2021	19	28	1
)-28552	2,415 Actual	04/22/2021	29	30	
0-28552	2,386 Actual	03/23/2021	40	35	
1-0-28552	2,346 Actual	02/16/2021	66	26	

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 2,600 2,600	AMOUNT \$127.84 \$338.26 \$6.67
	Sub-Total	\$472.77
	Total	\$963.54
Paid 16	122	



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

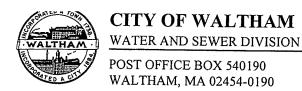
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001	IN
		DU
SERVICE ADDRESS		FA

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

P L P E A	ON OR BEFORE	12/31/21	\$963.54
A Y S E	AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	11/2/2021
DUE DA	VIE .
11/30/2	21
SERVICE AL	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

ON OR BEFORE	11/30/21		\$490.77
		<u> </u>	
		11/30/211	11/30/21

TRANSACTION THIS PERIOD	AMOÚNT
PREVIOUS BALANCE	\$234.26
PAYMENTS THROUGH 11/02/2021	\$0.00
ADJUSTMENTS THROUGH 11/02/2021	\$0.00
BALANCE FORWARD	\$234.26
<del>}</del>	

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,479 Actual	10/20/2021	15	28
	Reading History			
1-0-28552	2,479 Actual	10/20/2021	15	28
1-0-28552	2,464 Actual	09/22/2021	4	22
1-0-28552	2,460 Actual	08/31/2021	9	35
1-0-28552	2,451 Actual	07/27/2021	8	34
1-0-28552	2,443 Actual	06/23/2021	9	34
1-0-28552	2,434 Actual	05/20/2021	19	28
' 0-28552	2,415 Actual	04/22/2021	29	30
)-28552	2,386 Actual	03/23/2021	40	35
0-28552	2,346 Actual	02/16/2021	66	26
1-0-28552	2,280 Actual	01/21/2021	46	35

Current Bill Detail	<u>Usage/Unit</u>	AMOUNT
Monthly Water Usage	1,500	\$54.69
Monthly Sewer Usage	1,500	\$195.15
Monthly Meter Rental	_	\$6.67
	Sub-Total	\$256.51
	Total	\$490.77
Paid 1	3/14/5/	



## **CITY OF WALTHAM**

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001	I
SERVICE ADDRESS	ACCOUNT NUMBER	F

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

ON OR BEFORE	11/30/21	\$490.77
AMOUNT	PAID	



POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	10/4/2021
DUE DA	TE:
10/29/2	21
SERVICE AL	DDRESS
240 BEAVE	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS

ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

ON O	" 10/2 <b>9</b> /21-1	\$234.26
------	-----------------------	----------

	TRANSACTION THIS PERIOD	AMOUNT
	PREVIOUS BALANCE	\$153.55
	PAYMENTS THROUGH 10/04/2021	\$0.00
	ADJUSTMENTS THROUGH 10/04/2021	\$0.00
	BALANCE FORWARD	\$153.55
п		I

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No . Reading & Date			Usage	#Days
	Current			
1-0-28552	2,464 Actual	09/22/2021	4	22
	Reading History			
1-0-28552	2,464 Actual	09/22/2021	4	22
1-0-28552	2,460 Actual	08/31/2021	9	35
1-0-28552	2,451 Actual	07/27/2021	8	34
1-0-28552	2,443 Actual	06/23/2021	9	34
1-0-28552	2,434 Actual	05/20/2021	19	28
1-0-28552	2,415 Actual	04/22/2021	29	30
1-0-28552	2,386 Actual	03/23/2021	40	35
-28552	2,346 Actual	02/16/2021	66	26
. 0-28552	2,280 Actual	01/21/2021	46	35
1-0-28552	2,234 Actual	12/17/2020	38	30

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 400 400	AMOUNT \$22.00 \$52.04 \$6.67
	Sub-Total	\$80.71
	Total	\$234.26
Paid	1310121	



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

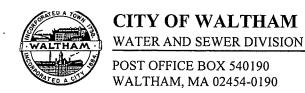
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001	11
SERVICE ADDRESS	ACCOUNT NUMBER	F.

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

P L P E A	ON OR BEFORE	10/29/21	\$234.26
S E	AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE:
1010001	9/3/2021
DUE	ÂTE
09/30	/21
SERVICE A	ADDRESS :
240 BEA	VER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

ON OR 09/30/21 BEFORE 09/30/21	\$153.55
--------------------------------	----------

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$625.09
PAYMENTS THROUGH 09/03/2021	-\$625.09
ADJUSTMENTS THROUGH 09/03/2021	\$0.00
BALANCE FORWARD	\$0.00

### MOVING? DI FASE CALL 781-314-3810 IN ADVANCE

	L <del>anara da la constanta de la </del>	•	ADVANCE	1-214-2010 HA	ING! PLEASE CALL /8	1410
I Isogo/I Init	Current Bill Detail	#Days	Usage		Reading & Date	Serial No
<u>Usage/Unit</u> 900 900	Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	35	9	08/31/2021	Current 2,460 Actual	1-0-28552
Sub-Total				.*		
Total					Reading History	
Total		35	9	08/31/2021	2,460 Actual	1-0-28552
	- ^	34	8	07/27/2021	2,451 Actual	1-0-28552
4		34	9	06/23/2021	2,443 Actual	1-0-28552
rest on	Touch men	28	19	05/20/2021	2,434 Actual	1-0-28552
		30	29	04/22/2021	2,415 Actual	1-0-28552
		35	40	03/23/2021	2,386 Actual	1-0-28552
		26	66	02/16/2021	2,346 Actual	0-28552
		35	46	01/21/2021	2,280 Actual	-28552
		30	38	12/17/2020	2,234 Actual	0-28552
	l	26	37	11/17/2020	2,196 Actual	1-0-28552



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

**AMOUNT** 

\$29.79

\$117.09 \$6.67

\$153.55

\$153.55

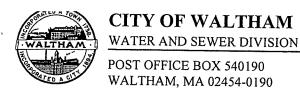
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766 

P L P E A	ON OR BEFORE	09/30/21	\$153.55
A Y S E	AMOUNT	PAID	



OFFICE HOURS Mon - Fri.

8:30am to 4:30pm

ACCOUNT NO:	BILLING DATE
1010001	8/2/2021
DUE DA	ATE
08/31/2	21
SERVICE AL	DDRESS
240 BEAVI	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS
ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

ON OR BEFORE 08/31/21
-----------------------

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$488.70
PAYMENTS THROUGH 08/02/2021	\$0.00
ADJUSTMENTS THROUGH 08/02/2021	\$0.00
BALANCE FORWARD	\$488.70
<u> </u>	

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,451 Actual	07/27/2021	8	34
	Reading History			
1-0-28552	2,451 Actual	07/27/2021	8	34
1-0-28552	2,443 Actual	06/23/2021	9	34
1-0-28552	2,434 Actual	05/20/2021	19	28
1-0-28552	2,415 Actual	04/22/2021	29	30
1-0-28552	2,386 Actual	03/23/2021	40	35
1-0-28552	2,346 Actual	02/16/2021	66	26
1-0-28552	2,280 Actual	01/21/2021	46	35
)-28552	2,234 Actual	12/17/2020	38	30
0-28552	2,196 Actual	11/17/2020	37	26
1-0-28552	2,159 Actual	10/22/2020	45	30

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 800 800	AMOUNT \$25.64 \$104.08 \$6.67
	Sub-Total	\$136.39
	Total	\$625.09
Paid 3/31	lar	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

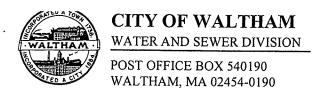
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

P L P E A	ON OR BEFORE	08/31/21	\$625.09
S E	AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO. BILLING DATE				
1010001 7/1/2021				
DUE DATE				
07/30/2	21			
SERVICE ADDRÉSS				
240 BEAV	ER ST			

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS
ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

BEFORE \$ \$100.70
--------------------

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$335.15
PAYMENTS THROUGH 07/01/2021	\$0.00
ADJUSTMENTS THROUGH 07/01/2021	\$0.00
BALANCE FORWARD	\$335.15

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
************	Current			
1-0-28552	2,443 Actual	06/23/2021	9	34
	Reading History			
1-0-28552	2,443 Actual	06/23/2021	9	34
1-0-28552	2,434 Actual	05/20/2021	19	28
1-0-28552	2,415 Actual	04/22/2021	29	30
1-0-28552	2,386 Actual	03/23/2021	40	35
1-0-28552	2,346 Actual	02/16/2021	66	26
1-0-28552	2,280 Actual	01/21/2021	46	35
1-0-28552	2,234 Actual	12/17/2020	38	30
0-28552	2,196 Actual	11/17/2020	37	26
1-0-28552	2,159 Actual	10/22/2020	45	30
1-0-28552	2,114 Actual	09/22/2020	16	29

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 900 900	AMOUNT \$29.79 \$117.09 \$6.67
	Sub-Total	\$153.55
	Total	\$488.70
Paid 8/3	lai	



# CITY OF WALTHAM WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

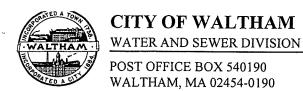
240 BEAVER ST	1010001
SERVICE ADDRESS:	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269 360 CAMPUS CENTER WAY AMHERST MA 01003 ON OR BEFORE 07/30/21 \$488.70

AMOUNT PAID



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO. BILLING DATE			
1010001 6/1/2021			
DUE DATE			
06/29/21			
SERVICE ADDRESS			
240 BEAV	ER ST		

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

|--|

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$1,279.76
PAYMENTS THROUGH 06/01/2021	-\$1,279.76
ADJUSTMENTS THROUGH 06/01/2021	\$0.00
BALANCE FORWARD	\$0.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,434 Actual	05/20/2021	19	28
	Reading History			
1-0-28552	2,434 Actual	05/20/2021	19	28
1-0-28552	2,415 Actual	04/22/2021	29	30
1-0-28552	2,386 Actual	03/23/2021	40	35
1-0-28552	2,346 Actual	02/16/2021	66	26
1-0-28552	2,280 Actual	01/21/2021	46	35
1-0-28552	2,234 Actual	12/17/2020	38	30
0-28552	2,196 Actual	11/17/2020	37	26
)-28552	2,159 Actual	10/22/2020	45	30
1-0-28552	2,114 Actual	09/22/2020	16	29
1-0-28552	2,098 Actual	08/24/2020	20	34

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 1,900 1,900	AMOUNT \$81.29 \$247.19 \$6.67
	Sub-Total Total	\$335.15 <b>\$335.15</b>
Paid 8/1	121	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

**Billing Information** (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

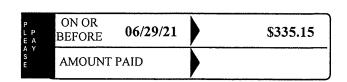
**BILL PAYABLE ON RECEIPT** MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766 





POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

		_
ACCOUNT NO.	BILLING DATE	
1010001	5/3/2021	
DUE DA	TÉ.	
05/28/2	2.1	
SERVICE AL	DDRESS	
240 BEAVI	ER ST	

**KETAIN THIS PORTION FOR YOUR RECORDS** 

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

P L P E A Y S E	ON OR BEFORE	05/28/21	\$1,279.76
_			 

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$2,065.42
PAYMENTS THROUGH 05/03/2021	-\$1,317.41
ADJUSTMENTS THROUGH 05/03/2021	\$0.00
BALANCE FORWARD	\$748.01
	i

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

			ADVAIL	-
Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,415 Actual	04/22/2021	29	30
	Reading History			
1-0-28552	2,415 Actual	04/22/2021	29	30
1-0-28552	2,386 Actual	03/23/2021	40	35
1-0-28552	2,346 Actual	02/16/2021	66	26
1-0-28552	2,280 Actual	01/21/2021	46	35
1-0-28552	2,234 Actual	12/17/2020	38	30
1-0-28552	2,196 Actual	11/17/2020	37	26
0-28552	2.159 Actual	10/22/2020	45	30
-28552	2,114 Actual	09/22/2020	16	29
1-0-28552	2,098 Actual	08/24/2020	20	34
1-0-28552	2.078 Actual	07/21/2020	14	28
	_,	0112112020	14	

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 2,900 2,900	AMOUNT \$147.79 \$377.29 \$6.67
	Sub-Total	\$531.75
`	Total	\$1,279.76
Λ	25/21	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

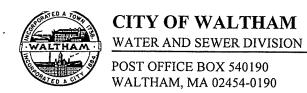
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

	1010001	
240 BEAVER ST	1010001	IN
The state of the s	ACCOCIATING MIDLA	D
SERVICE ADDRESS	ACCOUNT NUMBER	F
SOCIO DE CONTROL DE CO		

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

P L P E A	ON OR BEFORE	05/28/21	\$1,279.76
A Y S E	AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE			
1010001	4/1/2021			
DUE DA	ATE .			
04/30/	21			
SERVICE ADDRESS				
240 BEAVER ST				

**KETAIN THIS PORTION FOR YOUR RECORDS** 

UNIVERSITY OF MASSACHUSETTS
ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

|--|

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$2,196.82
PAYMENTS THROUGH 04/01/2021	-\$879.41
ADJUSTMENTS THROUGH 04/01/2021	\$0.00
BALANCE FORWARD	\$1,317.41
1	1

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

IVIO	VING: PLEASE CALL 78	21-214-2010 114	ADVANC	_		
Serial No	Reading & Date	-	Usage	#Days	Comment Bill Detail	T I / II I : 4
1-0-28552	Current 2,386 Actual	03/23/2021	40	35	Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 4,000 4,000
	Reading History					Sub-Total
1-0-28552	2.386 Actual	03/23/2021	40	35		Total
1-0-28552	2,346 Actual	02/16/2021	66	26		
1-0-28552	2,280 Actual	01/21/2021	46	35	~ ' \	
1-0-28552	2,234 Actual	12/17/2020	38	30		5/4/7
1-0-28552	2,196 Actual	11/17/2020	37	26	1 and	5/4/21
1-0-28552	2,159 Actual	10/22/2020	45	30		•
0-28552	2,114 Actual	09/22/2020	16	29		
-28552	2,098 Actual	08/24/2020	20	34		
0-28552	2,078 Actual	07/21/2020	14	28		
1-0-28552	2,064 Actual	06/23/2020	15	35	Į.	



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

AMOUNT \$220.94 \$520.40 \$6.67 \$748.01 \$2,065.42

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1010001

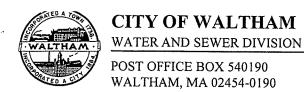
FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269 360 CAMPUS CENTER WAY AMHERST MA 01003

ON OR BEFORE 04/30/21 \$2,065.42

AMOUNT PAID



**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO	BILLING DATE
1010001	3/1/2021
DUED	ÁTE
03/31/	21
SERVICE A	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

ON O BEFOR	·	\$2,196.82

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$1,588.10
PAYMENTS THROUGH 03/01/2021	-\$708.69
ADJUSTMENTS THROUGH 03/01/2021	\$0.00
BALANCE FORWARD	\$879.41

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,346 Actual	02/16/2021	66	26
	Reading History			
1-0-28552	2,346 Actual	02/16/2021	66	26
1-0-28552	2,280 Actual	01/21/2021	46	35
1-0-28552	2,234 Actual	12/17/2020	38	30
1-0-28552	2,196 Actual	11/17/2020	37	26
1-0-28552	2,159 Actual	10/22/2020	45	30
1-0-28552	2,114 Actual	09/22/2020	16	29
1-0-28552	2,098 Actual	08/24/2020	20	34
)-28552	2,078 Actual	07/21/2020	14	28
1-0-28552	2,064 Actual	06/23/2020	15	35
1-0-28552	2,049 Actual	05/19/2020	19	25

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 6,600 6,600	AMOUNT \$452.08 \$858.66 \$6.67
•	Sub-Total	\$1,317.41
	Total	\$2,196.82

Paid 4/6/21



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

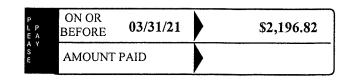
BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

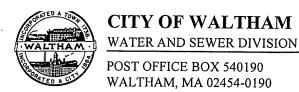
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS:	ACCOUNT NUMBER
240 BEAVER ST	1010001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766 





OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	2/1/2021
DUE DA	VIE
02/26/2	2.1
SERVICE AT	DDRESS
240 BEAVI	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

|--|

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$708.69
PAYMENTS THROUGH 02/01/2021	\$0.00
ADJUSTMENTS THROUGH 02/01/2021	\$0.00
BALANCE FORWARD	\$708.69

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

WOVING! PLEASE CALL 781-314-3810 IN ADVANCE				
Serial No	Reading & Date		Usage	#Days
-	Current			
1-0-28552	2,280 Actual	01/21/2021	46	35
	Reading History			
1-0-28552	2,280 Actual	01/21/2021	46	35
1-0-28552	2,234 Actual	12/17/2020	38	30
1-0-28552	2,196 Actual	11/17/2020	37	26
1-0-28552	2,159 Actual	10/22/2020	45	30
1-0-28552	2,114 Actual	09/22/2020	16	29
1-0-28552	2,098 Actual	08/24/2020	20	34
0-28552	2,078 Actual	07/21/2020	14	28
)-28552	2,064 Actual	06/23/2020	15	35
1-0-28552	2,049 Actual	05/19/2020	19	25
1-0-28552	2,030 Actual	04/24/2020	27	30

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 4,600 4,600	AMOUNT \$274.28 \$598.46 \$6.67
	Sub-Total	\$879.41
,	Total	\$1,588.10
Paud 3	人0121	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1010001	I
SERVICE ADDRESS	ACCOUNT NUMBER	I

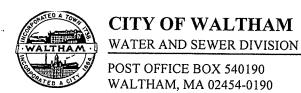
FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269 360 CAMPUS CENTER WAY AMHERST MA 01003

ON OR BEFORE 02/26/21 \$1,588.10

A Y S AMOUNT PAID



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1010001	1/4/2021
DUED	ATE :
01/29/	21
SERVICE A	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS
ATTN: UTILITIES DEPT. P.O. REFERENCE #A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

P L P E A A Y S E	ON OR BEFORE	01/29/21		\$708.69
SINGRE		para ang 1865 na mga mangsalatan mangsa	Salawa Asamuna	

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$1,546.54
PAYMENTS THROUGH 01/04/2021	-\$1,546.54
ADJUSTMENTS THROUGH 01/04/2021	\$0.00
BALANCE FORWARD	\$0.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			
1-0-28552	2,234 Actual	12/17/2020	38	30
	Reading History			
1-0-28552	2,234 Actual	12/17/2020	38	30
1-0-28552	2,196 Actual	11/17/2020	37	26
1-0-28552	2,159 Actual	10/22/2020	45	30
1-0-28552	2,114 Actual	09/22/2020	16	29
1-0-28552	2,098 Actual	08/24/2020	20	34
1-0-28552	2,078 Actual	07/21/2020	14	28
0-28552	2,064 Actual	06/23/2020	15	35
0-28552	2,049 Actual	05/19/2020	19	25
1-0-28552	2,030 Actual	04/24/2020	27	30
1-0-28552	2,003 Actual	03/25/2020	40	34

Current Bill Detail Monthly Water Usage Monthly Sewer Usage Monthly Meter Rental	<u>Usage/Unit</u> 3,800 3,800	AMOUNT \$207.64 \$494.38 \$6.67
	Sub-Total	\$708.69
	Total	\$708.69
Paud	2/5/21	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

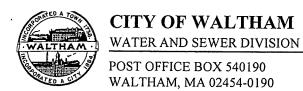
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1010001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735766

P L P E A	ON OR BEFORE	01/29/21	\$708.69
A Y S E	AMOUNT	PAID	•



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	LE BILLING DATE
1008001	11/4/2022
DUE DA	TEH Property
12/09/2	2
SERVICE AD	DRESS
240 BEAVE	R ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

P L P E A A Y S E	ON OR BEFORE	12/09/22	\$102.38

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

	Rea	ading & Date		Usage	#Days
	Curr	ent			
2553189	8,118	Manual estir	10/25/2022	0	91
I	Reading 1	History			
2553189	8,118	Manual estimate	10/25/2022	0	91
2553189	8,118	Estimate	07/26/2022		88
2553189	8,118	Actual	04/29/2022	0	112
2553189	8,118	Final Bill	01/07/2022	0	67
2553189	8,118	Actual	11/01/2021	4	95

Current Bill Detail	Usage/Unit	\$0.00 AMOUNT
INTEREST AS OF: 12/09/202 BALANCE FORWARD	2	0.00
PAYMENTS THROUGH 11/0 ADJUSTMENTS THROUGH		-\$102.38 \$0.00
PREVIOUS BALANCE		\$102.38

TRANSACTION THIS PERIOD AMOUNT

Current Bill Detail	<u>Usage/Unit</u>	<u>AMOUNT</u>
Meter Rental - Eastern		\$20.00
Water Usage (2 - Eastern)		\$66.00
Sewer Usage (2 - Eastern)	Triansiana.	\$16.38
	Sub-Total	\$102.38
	Total	\$102.38
Paid va	/\ /aa	T
1 2000	/ / AC	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 **Billing Information** (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

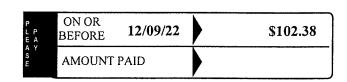
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

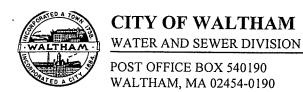
SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1008001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724







OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	8/10/2022
DUE DA	TE
. 09/12/2	2
SERVICE AL	DDRESS
240 BEAVI	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

ON OR 09/12/22 \$102.38 BEFORE

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$252.38
PAYMENTS THROUGH 08/10/2022	-\$252.38
ADJUSTMENTS THROUGH 08/10/2022	\$0.00
INTEREST AS OF: 09/12/2022	0.00
BALANCE FORWARD	\$0.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Reading & Date		Usage	#Days	
Current				
8,118	Estimate	07/26/2022		88
Reading 1	History			
8,118	Estimate	07/26/2022		88
8,118	Actual	04/29/2022	0	112
8,118	Final Bill	01/07/2022	0	67
8,118	Actual	11/01/2021	4	95
8,114	Actual	07/29/2021	0	90
	Curr 8,118 Reading 9 8,118 8,118 8,118 8,118	Current 8,118 Estimate  Reading History 8,118 Estimate 8,118 Actual 8,118 Final Bill 8,118 Actual	Current 8,118 Estimate 07/26/2022  Reading History 8,118 Estimate 07/26/2022 8,118 Actual 04/29/2022 8,118 Final Bill 01/07/2022 8,118 Actual 11/01/2021	Current 8,118 Estimate 07/26/2022  Reading History 8,118 Estimate 07/26/2022 8,118 Actual 04/29/2022 0 8,118 Final Bill 01/07/2022 0 8,118 Actual 11/01/2021 4

Current Bill Detail	<u>Usage/Unit</u>	AMOUNT
Meter Rental - Eastern		\$20.00
Water Usage (2 - Eastern)		\$66.00
Sewer Usage (2 - Eastern)	-	\$16.38
	Sub-Total	\$102.38
	Total	\$102.38



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

**Billing Information** (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

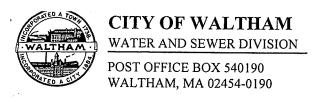
SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1008001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724 

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

ON OR 09/12/22 \$102.38 BEFORE AMOUNT PAID



**OFFICE HOURS** Mon - Fri.

8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	5/9/2022
DUE DA	VTE
06/10/2	22
SERVICE AI	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$102.38
PAYMENTS THROUGH 05/09/2022	-\$102.38
ADJUSTMENTS THROUGH 05/09/2022	\$0.00
INTEREST AS OF: 06/10/2022	0.00
BALANCE FORWARD	\$0.00

# **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Current   2553189   8,118   Actual   04/29/2022   0   112						
2553189 8,118 Actual 04/29/2022 0 112  Reading History  2553189 8,118 Actual 04/29/2022 0 112 2553189 8,118 Final Bill 01/07/2022 0 67 2553189 8,118 Actual 11/01/2021 4 95 2553189 8,114 Actual 07/29/2021 0 90	Serial No	Rea	ading & Date		Usage	#Days
Reading History  2553189 8,118 Actual 04/29/2022 0 112 2553189 8,118 Final Bill 01/07/2022 0 67 2553189 8,118 Actual 11/01/2021 4 95 2553189 8,114 Actual 07/29/2021 0 90		Curr	ent			
2553189     8,118     Actual     04/29/2022     0     112       2553189     8,118     Final Bill     01/07/2022     0     67       2553189     8,118     Actual     11/01/2021     4     95       2553189     8,114     Actual     07/29/2021     0     90	2553189	8,118	Actual	04/29/2022	0	112
2553189     8,118     Actual     04/29/2022     0     112       2553189     8,118     Final Bill     01/07/2022     0     67       2553189     8,118     Actual     11/01/2021     4     95       2553189     8,114     Actual     07/29/2021     0     90						
2553189 8,118 Final Bill 01/07/2022 0 67 2553189 8,118 Actual 11/01/2021 4 95 2553189 8,114 Actual 07/29/2021 0 90		Reading	History			
2553189     8,118 Final Bill     01/07/2022     0     67       2553189     8,118 Actual     11/01/2021     4     95       2553189     8,114 Actual     07/29/2021     0     90	2553189	8,118	Actual	04/29/2022	0	112
2553189 8,114 Actual 07/29/2021 0 90	2553189	8,118	Final Bill	01/07/2022	Ō	
0,72,72021	2553189	8,118	Actual	11/01/2021	4	95
A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2553189	8,114	Actual	07/29/2021	0	90
	2553189	8,114	Actual	04/30/2021	Ö	

<u>Usage/Unit</u>	<u>AMOUNT</u>
	\$20.00
2	\$150.00
	\$66.00
_	\$16.38
Sub-Total	\$252.38
Total	\$252.38
	2 Sub-Total

6/3/22



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

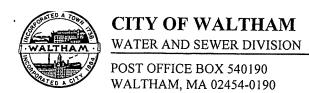
SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1008001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724 

CITY OF WALTHAM C/O BUILDING DEPT. 119 SCHOOL ST. WALTHAM MA 02452

ON OR 06/10/22 \$252.38 BEFORE AMOUNT PAID



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	1/10/2022
DUE D	ĀTĒ
02/09/	22
SERVICE A	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS
ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Reading & Date		Usage	#Days	
Current					
2553189	8,118	Final Bill	01/07/2022	0	67
	Reading	History			
2553189	8,118	Final Bill	01/07/2022	0	67
2553189	8,118	Actual	11/01/2021	4	95
2553189	8,114	Actual	07/29/2021	0	90
2553189	8,114	Actual	04/30/2021	0	85
2553189	8,114	Manual estimate	02/04/2021	0	98
2553189	8,114	Actual	10/29/2020	0	87

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$182.84
PAYMENTS THROUGH 01/10/2022	-\$182.84
ADJUSTMENTS THROUGH 01/10/2022	\$0.00
INTEREST AS OF: 02/09/2022	0.00
BALANCE FORWARD	\$0.00

Current Bill Detail Meter Rental - Eastern Water Usage (2 - Eastern) Sewer Usage (2 - Eastern)	<u>Usage/Unit</u>	AMOUNT \$20.00 \$66.00 \$16.38
2	Sub-Total	\$102.38
	Total	\$102.38
Paid 3/2	122	



# CITY OF WALTHAM WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

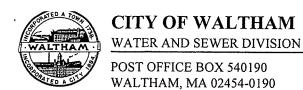
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1008001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724

P L P E A	ON OR BEFORE	02/09/22	•	\$102.38
S E	AMOUNT	PAID		



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO:	BILLING DATE
1008001	11/4/2021
DUE DA	ME
12/06/2	21
SERVICE AI	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS
ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

P ON OR 12/06/21 \$18	82.84
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TRANSACTION THIS PERIOD

# PREVIOUS BALANCE \$252.38 PAYMENTS THROUGH 11/03/2021 -\$252.38 ADJUSTMENTS THROUGH 11/03/2021 \$0.00 INTEREST AS OF: 12/06/2021 0.00 MOVING? PLEASE CALL 781-314-3810 IN ADVANCE BALANCE FORWARD \$0.00

Serial No	Reading & Date		Usage	#Days	
	Curi	·ent			
2553189	8,118	Actual	11/01/2021	4	95
	Reading	History			
			11/01/0001		
2553189	8,118	Actual	11/01/2021	4	95
2553189 2553189	8,118 8,114	Actual Actual	07/29/2021	4 0	95 90
2553189	-,			•	
	8,114 8,114	Actual	07/29/2021 04/30/2021	0	90

Current Bill Detail Meter Rental - Eastern	Usage/Unit	<u>AMOUNT</u> \$20.00
Misc Cross Connect Fee - Eastern		\$75.00
Water Usage (2 - Eastern)	400	\$66.00
Sewer Usage (2 - Eastern)	400_	\$21.84
	Sub-Total	\$182.84
	Total	\$182.84
Pard 1/L	122	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

AMOUNT

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1008001
SERVICE ADDRESS	ACCOUNT NUMBER

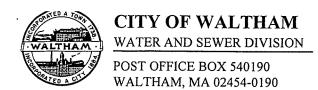
FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

P L P E A	ON OR BEFORE	12/06/21	<b>)</b>	\$182.84
A Y S E	AMOUNT	PAID		



**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	8/10/2021
DUEDA	TE
09/15/2	2.1
SERVICE AL	DDRESS
240 BEAVI	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

ON OR 09/15/21 \$252.38
-------------------------

TRANSACTION THIS PERIOD AMOUNT

## **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current			
2553189	8,114 Actual	07/29/2021	0	90
	Reading History			
2553189	Reading History 8,114 Actual	07/29/2021	0	90
2553189 2553189	0 3	07/29/2021 04/30/2021	0	90 85
	8,114 Actual	04/30/2021	=	
2553189	8,114 Actual 8,114 Actual	04/30/2021	0	85

BALANCE FORWARD		\$0.00
Current Bill Detail Meter Rental - Eastern Misc Cross Connect Fee - Water Usage (2 - Eastern) Sewer Usage (2 - Eastern)	<u>Usage/Unit</u> Eastern 2	AMOUNT \$20.00 \$150.00 \$66.00 \$16.38
	Sub-Total Total	\$252.38 <b>\$252.38</b>
Paid	٥/١٤/٦	. \

# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PREVIOUS BALANCE

PAYMENTS THROUGH 08/10/2021

INTEREST AS OF: 09/15/2021

ADJUSTMENTS THROUGH 08/10/2021

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

\$102.38

-\$102.38

\$0.00

0.00

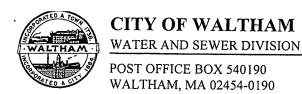
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1008001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724 

P L P E A	ON OR BEFORE	09/15/21	\$252.38
A Y S E	AMOUNT	PAID	



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	5/10/2021
DUE D	ATE
06/11/	21
SERVICE A	DDRESS
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

69	P L P E A S E	ON OR BEFORE	06/11/21	\$102.38
09	TRA	NSACTION	THIS PERIOD	AMOUNT

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Re	ading & Date		Usage	#Days
0.553.00	Curi				
2553189	8,114	Actual	04/30/2021	0	85
	Reading	History			
2553189	8,114	Actual	04/30/2021	0	85
2553189	8,114	Manual estimate	02/04/2021	0	98
2553189	8,114	Actual	10/29/2020	0	87
2553189	8,114	Actual	08/03/2020	0	95
2553189	8,114	Actual	04/30/2020	1	111

BALANCE FORWARD		\$0.00
Current Bill Detail Meter Rental - Eastern Water Usage (2 - Eastern) Sewer Usage (2 - Eastern)	<u>Usage/Unit</u>	AMOUNT \$20.00 \$66.00 \$16.38
	Sub-Total	\$102.38
	Total	\$102.38
Paid 61	22/21	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PREVIOUS BALANCE

PAYMENTS THROUGH 05/10/2021

INTEREST AS OF: 06/11/2021

ADJUSTMENTS THROUGH 05/10/2021

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

\$177.38

-\$177.38

\$0.00

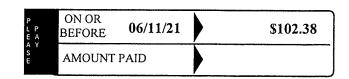
0.00

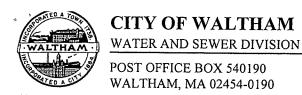
ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

240 BEAVER ST	1008001
SERVICE ADDRESS	ACCOUNT NUMBER

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724





**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1008001	2/12/2021
DUED	ÁTE
03/23	/21
SERVICE A	DDRESS .
240 BEA\	VER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CENTER WAY AMHERST MA 01003

TRANSACTION THIS PERIOD

PAYMENTS THROUGH 02/12/2021

INTEREST AS OF: 03/23/2021

ADJUSTMENTS THROUGH 02/12/2021

PREVIOUS BALANCE

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date		Usage	#Days
	Current	<del></del>		
2553189	8,114 Manual estir	02/04/2021	0	98
	Reading History			
2553189	Reading History 8,114 Manual estimate	: 02/04/2021	0	98
2553189 2553189	•	: 02/04/2021 10/29/2020	0 0	98 87
	8,114 Manual estimate			
2553189	8,114 Manual estimate 8,114 Actual	10/29/2020	0	87

00	\$0.00		BALANCE FORWARD
00 00 00	AMOUNT \$20.00 \$75.00 \$66.00 \$16.38	Usage/Unit	Current Bill Detail Meter Rental - Eastern Misc Cross Connect Fee - Eastern Water Usage (2 - Eastern) Sewer Usage (2 - Eastern)
38	\$177.38	Sub-Total	
8	\$177.38	Total [	
	\$20. \$75. \$66. \$16.	-	Misc Cross Connect Fee - Eastern Water Usage (2 - Eastern)

1 3/24/21



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

AMOUNT

\$102.38

-\$102.38

\$0.00

0.00

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACCOUNT NUMBER
240 BEAVER ST	1008001

FAILURE TO PAY A PAST DUE BALANCE MAY RESULT IN A PROPERTY TAX LIEN

4735724 

Р . А	ON OR BEFORE	03/23/21	<b>)</b>	\$177.38
Y	AMOUNT	PAID		

# TREASURER'S DEPARTMENT INFORMATION REGARDING CORNELIA WARREN FARM AND FIELD HOUSE 240 BEAVER STREET

### DiGregorio, Donna

From:

DiGregorio, Donna

ent:

Wednesday, December 7, 2022 11:32 AM

To:

Magno, Tom; Lacava, Suzanne; O'Malley, Martin

Subject:

240 Beaver Street, Waltham

### All:

I need the water bills paid for calendar years 2021 and 2022, and any monies received for rent, permit fees or any other receipts for the same two calendar years 2021 and 2022.

I need this information for the City Council Docket, so I need it today.

Thank you.

Mayor McCarthy

P.S. I don't think there is any rent paid, but maybe a receipt for a permit from either Building or Fire. I don't believe there is anything else, but I do need the amount of water bills.

## Magno, Tom

om:

DiGregorio, Donna

Sent:

Wednesday, December 7, 2022 11:32 AM

To:

Magno, Tom; Lacava, Suzanne; O'Malley, Martin

Subject:

240 Beaver Street, Waltham

### All:

I need the water bills paid for calendar years 2021 and 2022, and any monies received for rent, permit fees or any other receipts for the same two calendar years 2021 and 2022.

I need this information for the City Council Docket, so I need it today.

Thank you.

Mayor McCarthy

P.S. I don't think there is any rent paid, but maybe a receipt for a permit from either Building or Fire. I don't believe there is anything else, but I do need the amount of water bills.



# City of Waltham

## **Online Permit Information**

**Back to Property Information** 

Page 1 of 1

## Permit Information

Type / Category Building Department Building Permit

 Application No./Date
 A202242010
 05/18/2022

 Permit No./Date
 P202241985
 05/18/2022

Certificate No./Date
Total Fee \$ 26

Purpose / Notes & Comment / Work Description

FOUR 20 X 30 TENTS

## Linked Names

Owner name COMMONWEALTH OF MASS.,

C/O CITY OF WALTHAM

610 MAIN ST.

WALTHAM MA 02452-8022

Authorized Agent BARRY PERLA

12 MIDDLE ST LEOMINSTER MA

## **Permit Activity Information**

Type / Category	Started	Completed	Status	
Application Accepted	05/18/2022	05/18/2022	Yes	Making Mills Maching May and Angele Conference and
Issue Permit	05/18/2022	05/18/2022	Yes	



# City of Waltham

## Online Permit Information

**Back to Property Information** 

Page 1 of 1

# **Permit Information**

Type / Category

Fire Department

**General Permit** 

Application No./Date Permit No./Date

A202100444 F202100161

05/05/2021 05/05/2021

Certificate No./Date

Total Fee

\$ 50

Purpose / Notes & Comment / Work Description

Storage of (7) 33 lb. propane cylinders for use of forklift.

### Linked Names

Fuel Co

BOSTON AREA GLEANERS 240 BEAVER STREET WALTHAM MA 02452

## **Permit Activity Information**

Type / Category	Started	Completed	Status	
Application Received	05/05/2021	05/05/2021	Yes	
Issue Permit	05/05/2021	05/05/2021	Yes	



POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

. 205
BILLING DATE
12/1/2022
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22
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ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPTARTMENT 119 SCHOOL ST. WALTHAM MA 02452

BEFORE \$523.20
-----------------

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$389.85
PAYMENTS THROUGH 12/01/2022	-\$389.85
ADJUSTMENTS THROUGH 12/01/2022	\$0.00
BALANCE FORWARD	\$0.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Reading & Date			Usage	#Days	Υ.
	Curr	ent				(
1-0-10898	66	Actual	11/21/2022	l	27	N
1-0-10899	2,729	Actual	11/22/2022	73	28	l
	<b>.</b>	•				
	Reading	History				ı
1-0-10899	2,729	Actual	11/22/2022	73	28	1
1-0-10898	66	Actual	11/21/2022	1	27	i
1-0-10899	2,656	Actual	10/25/2022	58	29	
1-0-10898	65	Actual	10/25/2022	1	29	١ ١
1-0-10899	2,598	Actual	09/26/2022	42	31	
1-0-10898	64	Actual	09/26/2022	1	31	
1-0-10899	2,556	Actual	08/26/2022	55	32	1
0-10898	63	Actual	08/26/2022	5	33	I
1-0-10899	2,501	Actual	07/25/2022	41	28	
1-0-10898	58	Actual	07/24/2022	3	29	Į.

Current Bill Detail Monthly Water Usage	<u>Usage/Unit</u> 7,400	<u>AMOUNT</u> \$523.20
	Sub-Total	\$523.20
	Total	\$523.20
<u>New</u>	bot Jot	Fd



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACGOUNT NUMBER	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740 

P A	ON OR BEFORE	12/30/22	\$523.20
Y	AMOUNT	PAID	

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

	2 203
BILLING	DATE
11/1/2	2022
TË .	ary Mari
22	
DRESS	
ER ST	
	1 1/1/2 VTE 22 DDRESS

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPTARTMENT 119 SCHOOL ST. WALTHAM MA 02452

ON OR 11/30/22  BEFORE 11/30/22	\$389.85
---------------------------------	----------

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$247.61
PAYMENTS THROUGH 11/01/2022	-\$247.61
ADJUSTMENTS THROUGH 11/01/2022	\$0.00
BALANCE FORWARD	\$0.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Re	ading & Date		Usage	#Days
	Curi	rent			
1-0-10898	65	Actual	10/25/2022	1	29
1-0-10899	2,656	Actual	10/25/2022	58	29
	Daadina	Iliatanı			
1-0-10899	Reading	·	10/05/0000		
	2,656	Actual	10/25/2022	58	29
1-0-10898	65	Actual	10/25/2022	l	29
1-0-10899	2,598	Actual	09/26/2022	42	31
1-0-10898	64	Actual	09/26/2022	1	31
1-0-10899	2,556	Actual	08/26/2022	55	32
1-0-10898	63	Actual	08/26/2022	5	33
1 0-10899	2,501	Actual	07/25/2022	41	28
)-10898	58	Actual	07/24/2022	3	29
1-0-10899	2,460	Actual	06/27/2022	40	30
1-0-10898	55	Actual	06/25/2022	Ő	28

Current Bill Detail Monthly Water Usage	<u>Usage/Unit</u> 5,900_	<u>AMOUNT</u> \$389.85
	Sub-Total	\$389.85
	Total	\$389.85
Paid	W/8/2	J-



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 **Billing Information** (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACCOUNT NOMBER	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740 

P L P E A	ON OR BEFORE	11/30/22	<b>)</b>	\$389.85
S E	AMOUNT	PAID		

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

		200
ACCOUNT NO.	BILLING DA	ŤΕ
1009001	10/3/2022	ļ
DUE DA	TE	
10/31/2	2	
SERVICE AL	DRESS	
240 BEAVE	ER ST	

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPTARTMENT 119 SCHOOL ST. WALTHAM MA 02452

|--|

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$398.74
PAYMENTS THROUGH 10/03/2022	-\$398.74
ADJUSTMENTS THROUGH 10/03/2022	\$0.00
BALANCE FORWARD	\$0.00
į	

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

	VIII . I LL.	JOE CALL	781-314-3810 IN	ADVANC	L	L		
Serial No	Read	ling & Date		Usage	#Days	Cumant Dill Datail	T I /T I	
	Curre	nt				Current Bill Detail	<u>Usage/Unit</u>	<u>AMOUNT</u>
1-0-10898	64	Actual	09/26/2022	1	31	Monthly Water Usage	4,300	\$247.61
1-0-10899	2,598	Actual	09/26/2022	42	31		Sub-Total	\$247.61
							Total	\$247.61
	Reading H	listory						
1-0-10899	2,598	Actual	09/26/2022	42	31	× .		
1-0-10898	64	Actual	09/26/2022	1	31			
1-0-10899	2,556	Actual	08/26/2022	55	32	1010	10/28/22	
1-0-10898	63 .	Actual	08/26/2022	5	33	1	1 3 1 2	_
1-0-10899	2,501	Actual	07/25/2022	41	28			
1-0-10898	58	Actual	07/24/2022	3	29			
1-0-10899	2,460	Actual	06/27/2022	40	30			
-10898	55 /	Actual	06/25/2022	0	28	İ		
1-0-10899	2,420	Actual	05/28/2022	22	33			
1-0-10898	55	Actual	05/28/2022	0	33	Į		



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	KARATE ALCOHOLIS NEW TRINGS OF THE STATE OF	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740

P L P E A	ON OR BEFORE	10/31/22	<b>)</b>	\$247.61
S E	AMOUNT	PAID		

**OFFICE HOURS** Mon - Fri.

8:30am to 4:30pm

ACCOUNT NO. BILLING DATE 1009001 9/1/2022 DUE DATE 09/30/22 SERVICE ADDRESS 240 BEAVER ST

269

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPTARTMENT 119 SCHOOL ST. WALTHAM MA 02452

P L P E A A Y S E	ON OR BEFORE	09/30/22	\$398.74

7.44
7.44
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0.00

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

Serial No	Rea	ding & Date		Usage	#Days	Υ		
				Usage	прауз	Current Bill Detail	Usage/Unit	AMOUNT
	Curr	ent						
1-0-10898	63	Actual	08/26/2022	5	33	Monthly Water Usage	6,000	\$398.74
1-0-10899	2,556	Actual	08/26/2022	55	32		Sub-Total	\$398.74
							Total	\$398.74
	Reading I	History						
1-0-10899	2,556	Actual	08/26/2022	55	32	l ~		
1-0-10898	63	Actual	08/26/2022	5	33	(7)	01 1	
1-0-10899	2,501	Actual	07/25/2022	41	28	\aud	9/23/22	
1-0-10898	58	Actual	07/24/2022	3	29		. 331 000	
1-0-10899	2,460	Actual	06/27/2022	40	30			
1-0-10898	55	Actual	06/25/2022	0	28			
1-0-10899	2,420	Actual	05/28/2022	22	33			
)-10898	55	Actual	05/28/2022	0	33			
0-10899	2,398	Actual	04/25/2022	61	187			
1-0-10898	55	Actual	04/25/2022	ì	187			



## **CITY OF WALTHAM**

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

**BILL PAYABLE ON RECEIPT** MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	LEGICLE OF THE CONTRACTOR OF T	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740 

P L P E A A Y S E	ON OR BEFORE	09/30/22	<b>)</b>	\$398.74
	AMOUNT	PAID	<b>)</b>	



POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

	2 200
ACCOUNT NO.	BILLING DATE
1009001	8/1/2022
DUE DA	Œ.
08/31/2	22
SERVICE AL	DDRESS
240 BEAVE	ER ST

KETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPTARTMENT 119 SCHOOL ST. WALTHAM MA 02452

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$322.18
PAYMENTS THROUGH 08/01/2022	-\$101.24
ADJUSTMENTS THROUGH 08/01/2022	\$0.00
BALANCE FORWARD	\$220.94

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Re	ading & Date		Usage	#Days
	Curi	ent			
1-0-10898	58	Actual	07/24/2022	3	29
1-0-10899	2,501	Actual	07/25/2022	41	28
	Reading	History			
1-0-10899	2,501	Actual	07/25/2022	41	28
1-0-10898	58	Actual	07/24/2022	3	29
1-0-10899	2,460	Actual	06/27/2022	40	30
1-0-10898	55	Actual	06/25/2022	0	28
1-0-10899	2,420	Actual	05/28/2022	22	33
1-0-10898	55	Actual	05/28/2022	0	33
1-0-10899	2,398	Actual	04/25/2022	61	187
)-10898	55	Actual	04/25/2022	1	187
0-10899	2,337	Historic	10/20/2021	43	28
1-0-10898	54	Historic	10/20/2021		28

Current Bill Detail Monthly Water Usage	<u>Usage/Unit</u> 4,400	AMOUNT \$256.50
	Sub-Total	\$256.50
	Total	\$477.44

Paid 8/26/22



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS		FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740

P L P E A	ON OR BEFORE	08/31/22	•	\$477.44
S E	AMOUNT	PAID		

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

	239
BILLING DATE	
7/1/2022	
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ER ST	
	Print Transport From Sight an expression and described Transport Constitution

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPTARTMENT 119 SCHOOL ST. WALTHAM MA 02452

BEFORE 07/29/22 \$322.18		07/29/22	\$322.18
--------------------------	--	----------	----------

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$101.24
PAYMENTS THROUGH 07/01/2022	\$0.00
ADJUSTMENTS THROUGH 07/01/2022	\$0.00
BALANCE FORWARD	\$101.24

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

					-
Serial No	Rea	ading & Date		Usage	#Days
	Curr	ent			
1-0-10898	55	Actual	06/25/2022	0	28
1-0-10899	2,460	Actual	06/27/2022	40	30
	Reading	History			
1-0-10899	2,460	Actual	06/27/2022	40	30
1-0-10898	55	Actual	06/25/2022	0	28
1-0-10899	2,420	Actual	05/28/2022	22	33
1-0-10898	55	Actual	05/28/2022	0	33
1-0-10899	2,398	Actual	04/25/2022	61	187
1-0-10898	55	Actual	04/25/2022	1	187
0-10899	2,337	Historic	10/20/2021	43	28
)-10898	54	Historic	10/20/2021		28
1-0-10899	2,294	Actual	09/22/2021	27	22
1-0-10898	54	Actual	09/22/2021	0	22

Current Bill Detail Monthly Water Usage	<u>Usage/Unit</u> 4,000	<u>AMOUNT</u> \$220.94
	Sub-Total	\$220.94
	Total	\$322.18
Paid 8/1	=133	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

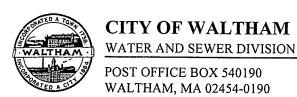
BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	ACCOUNT NUMBER	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740

P L P E A	ON OR BEFORE	07/29/22	<b>)</b>	\$322.18
A Y S E	AMOUNT PAID			



OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

	1 270
ACCOUNT NO.	BILLING DATE
1009001	6/1/2022
DUE D	ATE
06/30/	/22
SERVICE A	DDRESS.
240 BEA\	VER ST

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPTARTMENT 119 SCHOOL ST. WALTHAM MA 02452

ON OR 06/30/22 BEFORE 06/30/22	\$101.24
--------------------------------	----------

16.52
16.52
00.00
00.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Rea	iding & Date		Usage	#Days	Cumant Dill Datail	T Y /T T : 4	
	Curr	ent				Current Bill Detail	<u>Usage/Unit</u>	AMOUNT
1-0-10898	55	Actual	05/28/2022	0	33	Monthly Water Usage	2,200	\$101.24
1-0-10899	2,420	Actual	05/28/2022	22	33		Sub-Total	\$101.24
							Total	\$101.24
	Reading	History				`		
1-0-10899	2,420	Actual	05/28/2022	22	33		71-1-	
1-0-10898	55	Actual	05/28/2022	0	33	MAN	7/8/22	
1-0-10899	2,398	Actual	04/25/2022	61	187	1 12004	1010	
1-0-10898	55	Actual	04/25/2022	1	187			
1-0-10899	2,337	Historic	10/20/2021	43	28	}		
1-0-10898	54	Historic	10/20/2021		28			
' 0-10899	2,294	Actual	09/22/2021	27	22			
) <del>-</del> 10898	54	Actual	09/22/2021	0	- 22			
ı-0-10899	2,267	Actual	08/31/2021	49	35			
1-0-10898	54	Actual	08/31/2021	3	35	Į.		

WALTHAM

## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	S		FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST		1009001	IN A PROPERTY TAX LIEN

4735740

P L P E A	ON OR BEFORE	06/30/22	<b>)</b>	\$101.24
A Y S E	AMOUNT	PAID		

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

The state of the s	8 2	40
ACCOUNT NO.	BILLING DATE	
1009001	5/2/2022	
DUE DA	VTÉ	
05/31/2	22	
SERVICE AL	DDRESS	
240 BEAV	ER ST	

RETAIN THIS PORTION FOR YOUR RECORDS

CITY OF WALTHAM C/O BUILDING DEPTARTMENT 119 SCHOOL ST. WALTHAM MA 02452

E	ON OR 05/31/2 BEFORE	\$416.52
---	----------------------	----------

AMOUNT
\$0.00
\$0.00
\$0.00
\$0.00

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	al No Reading & Date			Usage	#Days	$\gamma_{a}$
	Curr	ent				Current
1-0-10898	55	Actual	04/25/2022	1	187	Monthl
1-0-10899	2,398	Actual	04/25/2022	61	187	
	Reading 1	History				
1-0-10899	2,398	Actual	04/25/2022	61	187	
1-0-10898	55	Actual	04/25/2022	1	187	
1-0-10899	2,337	Historic	10/20/2021	43	28	1 7
1-0-10898	54	Historic	10/20/2021		28	· `
1-0-10899	2,294	Actual	09/22/2021	27	22	
1-0-10898	54	Actual	09/22/2021	0	22	
9-10899	2,267	Actual	08/31/2021	49	35	l
-10898	54	Actual	08/31/2021	3	35	
1-0-10899	2,218	Actual	07/27/2021	41	34	
1-0-10898	51	Actual	07/27/2021	3	34	l

Current Bill Detail Monthly Water Usage	<u>Usage/Unit</u> 6,200	<u>AMOUNT</u> \$416.52
	Sub-Total	\$416.52
	Total	\$416.52
Paid:	5/20/20	<b>)</b>



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

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BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	FOR SALE OF A COLUMN TO A SALE OF THE SALE	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIÉN

4735740

P L P E A	ON OR BEFORE	05/31/22		\$416.52
A Y S E	AMOUNT	PAID	<b>)</b>	

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

OFFICE HOURS Mon - Fri. 8:30am to 4:30pm

	9 1
ACCOUNT NO.	BILLING DATE
1009001	10/27/2021
DUE DA	ATE
11/26/2	21
SERVICE AI	DDRESS:
240 BEAV	ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CTR WAY AMHERST MA 01003

P L P E A A Y S E	ON OR BEFORE	11/26/21	\$2,006.18

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$0.00
PAYMENTS THROUGH 10/27/2021	\$0.00
ADJUSTMENTS THROUGH 10/27/2021	\$0.00
BALANCE FORWARD	\$0.00
	1

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

Serial No	Re	ading & Date	Usage	#Days	
	Cur	rent	· · · · · · · · · · · · · · · · · · ·		
1-0-10898	54	Historic	10/20/2021		28
1-0-10899	2,337	Historic	10/20/2021	43	28
	Reading	History			
1-0-10899	2,337	Historic	10/20/2021	43	28
1-0-10898	54	Historic	10/20/2021		28
1-0-10899	2,294	Actual	09/22/2021	27	22
1-0-10898	54	Actual	09/22/2021	0	22
1-0-10899	2,267	Actual	08/31/2021	49	35
1-0-10898	54	Actual	08/31/2021	3	35
0-10899	2,218	Actual	07/27/2021	41	34
J-10898	51	Actual	07/27/2021	3	34
i-0-10899	2,177	Actual	06/23/2021	57	34
1-0-10898	48	Actual	06/23/2021	3	34

Current Bill Detail Monthly Water Usage	<u>Usage/Unit</u> 4,300	<u>AMOUNT</u> \$2,006.18
	Sub-Total	\$2,006.18
	Total	\$2,006.18
Paud "	1121	



# CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS	I SEE SEE SEE SEE SEE SEE SEE SEE SEE SE	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740

P L P E A	ON OR BEFORE	11/26/21	•	\$2,006.18
A Y S E	AMOUNT	PAID		



POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

**OFFICE HOURS** Mon - Fri. 8:30am to 4:30pm

ACCOUNT NO.	BILLING DATE
1009001	2/1/2021
DUE D	ATE
02/26/	21
SERVICE A	DDRESS
240 BEAV	/ER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS

ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CTR WAY AMHERST MA 01003

|--|

TRANSACTION THIS PERIOD	AMOUNT
PREVIOUS BALANCE	\$36.67
PAYMENTS THROUGH 02/01/2021	\$0.00
ADJUSTMENTS THROUGH 02/01/2021	\$0.00
BALANCE FORWARD	\$36.67

### **MOVING? PLEASE CALL 781-314-3810 IN ADVANCE**

THE THIRD CALL FOI SIT SOID IN ADVANCE								
Serial No	Read	ling & Date	3	Usage	#Days	Command Dill Dadail	11/11-4	
	Curre	nt				Current Bill Detail	<u>Usage/Unit</u>	<u>AMOUNT</u>
						Monthly Water Usage		\$36.67
							Sub-Total	\$36.67
							Total	\$73.34
	Reading H	listory				e		
1-0-10899	2,025	Actual	12/18/2020	7	30			
1-0-10898	43	Actual	12/18/2020	0	30	1 Dava	2/5/21	
1-0-10899	2,018	Actual	11/18/2020	14	27	I LUUR	13121	
1-0-10898	43	Actual	11/18/2020	0	27			
1-0-10899	2,004	Actual	10/22/2020	32	30			
1-0-10898	43 /	Actual	10/22/2020	0	30			
1-0-10899	1,972	Actual	09/22/2020	28	29			
)-10898	43 /	Actual	09/22/2020	0	29			
0-10899	1,944	Actual	08/24/2020	40	34			
1-0-10898	43 A	Actual	08/24/2020	3	34	Į		



## CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190

Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

SERVICE ADDRESS 240 BEAVER ST	ACCOUNT NUMBER	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740 

P L P E A	ON OR BEFORE	02/26/21	\$73.34
A Y S E	AMOUNT PAID		



POST OFFICE BOX 540190

Billing Information (781)314-3810

ACCOUNT NO. BILLING DATE 1009001 1/4/2021 DUE DATE 01/29/21 SERVICE ADDRESS

WALTHAM, MA 02454-0190 **OFFICE HOURS** Mon - Fri.

> 8:30am to 4:30pm 240 BEAVER ST

RETAIN THIS PORTION FOR YOUR RECORDS

UNIVERSITY OF MASSACHUSETTS

ATTN: UTILITIES DEPT. PO/REFERENCE # A000868269

360 CAMPUS CTR WAY AMHERST MA 01003

P A Y	ON OR BEFORE	01/29/21		\$36.67
			<u> </u>	

TRANSACTION THIS PERIOD	AMÖUNT
PREVIOUS BALANCE	\$139.40
PAYMENTS THROUGH 01/04/2021	-\$139.40
ADJUSTMENTS THROUGH 01/04/2021	\$0.00
BALANCE FORWARD	\$0.00

### MOVING? PLEASE CALL 781-314-3810 IN ADVANCE

WIOVING! PLEASE CALL 781-314-3810 IN ADVANCE					
Serial No	Rea	ading & Date		Usage	#Days
	Current				
1-0-10898	43	Actual	12/18/2020	0	30
1-0-10899	2,025	Actual	12/18/2020	7	30
	Reading	History			
1-0-10899	2,025	Actual	12/18/2020	7	30
1-0-10898	43	Actual	12/18/2020	0	30
1-0-10899	2,018	Actual	11/18/2020	14	27
1-0-10898	43	Actual	11/18/2020	0	27
1-0-10899	2,004	Actual	10/22/2020	32	30
1-0-10898	43	Actual	10/22/2020	0	30
1-0-10899	1,972	Actual	09/22/2020	28	29
)-10898	43	Actual	09/22/2020	0	29
0-10899	1,944	Actual	08/24/2020	40	34
1-0-10898	43	Actual	08/24/2020	3	34

Current Bill Detail Monthly Water Usage	<u>Usage/Unit</u> 700	AMOUNT \$36.67
	Sub-Total	\$36.67

Total



### CITY OF WALTHAM

WATER AND SEWER DIVISION

POST OFFICE BOX 540190 WALTHAM, MA 02454-0190 Billing Information (781)314-3810

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

BILL PAYABLE ON RECEIPT MAKE CHECKS PAYABLE TO CITY OF WALTHAM

\$36.67

ANY AMOUNT WHICH IS NOT PAID BY DUE DATE WILL BE SUBJECT TO INTEREST CHARGES OF 12 % PER YEAR

		ACCOUNT NUMBER	FAILURE TO PAY A PAST DUE BALANCE MAY RESULT
L	240 BEAVER ST	1009001	IN A PROPERTY TAX LIEN

4735740

P L P E A	ON OR BEFORE	01/29/21	<b>)</b>	\$36.67
S E	AMOUNT PAID		<b>)</b>	